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PART II.

A

METHODICAL INTRODUCTION

TO THE

PRACTICE

OF THE

ART OF MEDICINE.

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A

METHODICAL INTRODUCTION

TO THE

THEORY AND PRACTICE

OF THE

ART OF MEDICINE.

THE SECOND EDITION,

ENLARGED AND CORRECTED.

By DAVID MACBRIDE, M.D.

VOL. II.

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A

METHODICAL INTRODUCTION

TO THE

PRACTICE

OF THE

ART OF MEDICINE.

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BOOK I.

FEVERS.

CHAP. I.

Of continued Fevers; their Diſtinctions into different Species.

THOUGH men poſſeſſed of extraordinary talents, and a happy turn for obſervation, may, in time, attain high degrees of knowledge, and facility, in the art of curing diſeaſes, without much aid from books; yet, by far the greater part of the young people, who are entering on the buſineſs of their profeſſion, will find themſelves miſerably diſappointed, if they expect to arrive at eminence in any other way than by ſtudying the hiſtory of diſeaſes; thus, acquiring the experience of thoſe who have gone before them.

But as this hiſtory lies ſcattered in thouſands of different caſes, and obſervations, recorded by innumerable writers, multitudes of them muſt for ever continue unknown to all, except ſuch as are not only bleſſed with opulent fortunes to enable them to purchaſe large libraries, but have alſo uncommon ſhares of patience and application to ſearch through the various authors; and when they ſhall have done all this, how few memories are ſo tenacious as to retain a twentieth part of ſuch unconnected facts? The younger practitioners therefore, lie under infinite obligations to thoſe ſagacious men who firſt deviſed the ſyſtematic method of arranging the Hiſtories of Diſeaſes, and eſpecially to the one who with unparalleled labour has carried it into execution.

What a chaos would natural hiſtory be at this day, if the many thouſands of ſubjects which it contains, had not been arranged by the ingenuity of different authors? And, in proportion to their number, ſuch was the Hiſtory of Diſeaſes, until the Noſologia Methodica made its appearance; but if future obſervators, and collectors of caſes, will but refer their hiſtories, to the reſpective claſſes, orders, and genera, poſterity will not have the reaſon that we have had, to complain of this want of preciſion.

The preſent work is publiſhed chiefly with the view of giving Students a taſte for this regularity, as well as to ſhew how they may avail themſelves of the induſtry of the indefatigable Sauvages, (whoſe book may be conſidered as a Digeſt of the whole Hiſtory of Diſeaſes) and teach them to arrange

range ſuch caſes as may chance to fall within the compaſs of their own reading and obſervation.*

In order to forward theſe very deſirable ends, we now proceed to diſtinguiſh the different ſpecies of continued fevers.†

From the deſcription and theory formerly laid down, it is preſumed that the reader ſufficiently comprehends the general nature of fevers; he will alſo remember that this order of diſeaſes conſiſts of five genera; the *continued fever*, the *intermittent*, the *remittent*, the *eruptive*, and the *hectic*.

The *continued fever* is diſtinguiſhable into five ſpecies: 1. The *ſimple*. 2. The *inflammatory*. 3. The *nervous*. 4. The *putrid*. And, 5. The *mixed*.

* Since this Book was firſt publiſhed, ſeveral new genera of diſeaſes have occurred, particularly, the *Proſopalgia*, *Angina Pectoris*, *Sibbens*, and *Morbus Veſicularis*; all theſe fell naturally into their reſpective orders; and have accordingly been introduced in the preſent edition.

† Such of our readers as happen to be totally uninformed with reſpect to the ſyſtematic method, and have never ſeen either the Noſologia of Sauvages, or Synopſis of Dr. Cullen, have no doubt been ſurprized at many of the new denominations of diſeaſes which have already been introduced, and will be more ſo, at the numbers which they will meet with in the courſe of the preſent volume; but if they are acquainted with theſe authors, they will quickly perceive that the diſtinctions here uſed, are trifling in compariſon of what they have adopted; and it was thought neceſſary thus to curtail them, leſt their number ſhould terrify the Student, and give a diſtaſte to the ſcheme of arrangement which we ſo ſtrenuouſly endeavour to recommend.

1. A *ſimple continued fever*, is one wherein there are no diſtinguiſhing ſigns of inflammation, no very diſtreſſing nervous ſymptom, nor any evident corruption of the fluids; and where the heat cannot be ſaid to be either of the truly inflammatory, or of the putrefactive kind; the oppreſſion alſo, nauſea and weakneſs, are not extreme; and the head, though perhaps much pained, remains tolerably clear; the pulſe, though frequent, is uniform, and without any remarkable hardneſs.

Theſe ſimple fevers take their riſe from errors in diet; from cold; from too violent exerciſe; from the ſuppreſſion of ſome natural diſcharge; from the retention of acrid and offenſive matters in the alimentary canal; or from ſome external hurt or injury; and theſe happening in conſtitutions where both ſolids and fluids are in the moſt ſound and healthy ſtate.

2. But when a continued fever takes place in very robuſt conſtitutions, where there is great ſtrength and firmneſs of the veſſels, which are replete with denſe blood, abounding in the colouring part, theſe particles, when put into violent motion by the force of the ſtimulus applied to the heart and arterial ſyſtem, raiſe the higheſt degrees of heat and dryneſs; and the groſs particles being forced into canals which naturally ought to ſuffer only the finer and more ſubtile fluids to paſs, will diſtend the veſſels, and, diſtracting the ſenſible fibres, produce fluſhing and redneſs of the face and eyes, accompanied with violent pain in the head, and other parts of the body. This ſpecies of fever,

ver, from the full, ſtrong, hard, and rapid pulſe, and the remarkable exceſs of heat which diſtinguiſh it, is termed the *Inflammatory Fever*.

3. In the oppoſite conſtitution, where the fluids are poor and thin, and the nervous ſyſtem remarkably ſuſceptible of impreſſions; when a fever ſeizes, the degrees of heat are ſeldom high, the pulſe neither full nor ſtrong, though quick and irregular; and the thirſt, which depends much on the degree of feveriſh heat, ſeldom ſo violent as to give much diſtreſs; but as the ſolids in general are in a ſtate of morbid relaxation, the pores of the ſkin, for the moſt part, allow the ſubcutaneous fluids to ouze forth in clammy ſweats, while the weakneſs is ſtill more remarkable than in the inflammatory fever, and there is a much greater tendency to ſpaſm, and to the other ſymptoms which depend on diſorder of the nervous ſyſtem.

From theſe circumſtances it neceſſarily happens, that this ſpecies of fever is not ſo rapid in its progreſs, nor of ſuch ſhort duration, as the inflammatory fever, becauſe the increaſed force of the fluids is not ſufficient to deſtroy the texture of the ſolids in that ſhort ſpace of time which is obſervable in the diſeaſe laſt mentioned; hence this ſpecies is termed the *Slow* or *Nervous Fever*.

4. In the three afore-mentioned ſpecies, the craſis of the blood is not ſuppoſed to ſuffer much injury, at leaſt previous to, or at the commencement of the diſeaſe; as the fever advances indeed, particularly thoſe which ſet out with high degrees of inflammatory heat, we frequently meet with appearances

pearances and ſymptoms that denote high degrees of corruption and ſharpneſs, and ſhew the texture of the blood to be much diſſolved; hence it often tranſudes from the pores in the coats of the ſubcutaneous arteries, or perhaps corrodes them, and eſcapes into the cellular parts of the ſkin, raiſing up the cuticle, or forming ſpots of various hues: but there is a fourth ſpecies of continued fever, wherein the fluids, from the very firſt onſet, appear to be in the corrupt or depraved ſtate; and this is termed the *Putrid*, from the evident tendency to putrefaction; and may be ſubdivided into ſeveral varieties, ſome of which ariſe from a ſpecific acrimony, and are highly infectious; others are epidemical in particular ſeaſons; and ſome are endemic, or peculiar to certain climates.

5. But very often we meet with violent continued fevers, which are ſo indiſtinctly marked, that it is not eaſy to ſay whether they ought to be called inflammatory, nervous or putrid, the ſymptoms peculiar to each of the three ſpecies, being ſo equally blended, or running into one another by ſuch an imperceptible gradation, that the bounds which diſtinguiſh them cannot be preciſely determined: thus, for inſtance, extreme nauſea, and total loſs of ſtrength, which are diſtinguiſhing ſigns of the putrid fever, are often found along with great heat, and a quick, ſtrong, and hard pulſe, which are diſtinguiſhing ſigns of the inflammatory fever.

Theſe muſt therefore be termed *Mixed Fevers*.

Thus we have, in all, five ſpecies of the continued fever.

CHAP.

CHAP. II.

Methods of Treatment in Cases of simple continued Fever.

WHEN we find a person complaining of loss of strength, nausea, thirst, and inability to sleep, accompanied with a quick pulse, a foul or parched tongue, and a hot skin, we shall pronounce that person to be in a fever; and if there be no other signs or greater number of symptoms, we shall term it only a *simple fever*.

It is unnecessary to enter into a particular detail of the manner in which simple continued fevers begin their attack, since this may be collected from what has been already said concerning the rise and progress of fevers in general; all that now remains is, to shew how we are to conduct ourselves when it appears that there are no signs of extraordinary *inflammation*, no very distressing *nervous* complaint, nor any remarkable tendency to *putrefaction*.

Since it very seldom happens that physicians have an opportunity of seeing the commencement of a feverish attack, or that even the apothecary is called in, except in cases where the first seizure has been accompanied with uncommon degrees of distress; the directions that next immediately follow, may be considered as rather addressed to the patients, or their domestic friends, than to those

medical perſons, who in ſome days afterwards, may perhaps be applied to for their advice.

In caſes where the ſymptoms are in the mildeſt degree, the affair may often be truſted entirely to Nature, the affected perſon only taking care to abſtain from every thing that might load the ſtomach, drinking freely of ſome cooling liquor, ſuch as butter-milk whey, ſage tea, or barley water, and remain in bed, to encourage perſpiration.

But if there ſhould be a good deal of oppreſſion and heat, with a full pulſe, and nauſea, then ſome ounces of blood muſt be taken away, and the ſtomach ought to be rinſed by a large draught of camomile tea.

Afterwards, let a ſolution of manna and Rochelle ſalt, in ſome convenient vehicle, be given in ſuch divided doſes as ſhall operate, two or three times.

When the febrile ſymptoms depend upon ſome cauſe which is eaſy to be removed, theſe evacuations will generally prevent further miſchief; but if it ſhould be found on the ſucceeding day, that the heat and oppreſſion continue, the ſkin remaining dry, the tongue foul, and the ſick perſon has had but a reſtleſs night, we muſt then have recourſe to more powerful remedies, and thereby endeavour to prevent the eſtabliſhment of the fever.

This is the time, and indeed it is the proper one, when people who place their confidence in James's Powder uſually make trial of its effects; but

but previous to the adminiſtration of this, or any other medicine of ſimilar properties, if the patient is of a full habit, and the ſymptoms of heat, oppreſſion, and head-ach at all remarkable, more blood muſt be taken away, and in ſuch quantity as the exigency of the caſe may require, and which the pulſe will always enable practitioners to determine.

In London, James's Powder has of late been brought into the apothecaries ſhops, and the phyſicians preſcribe it; but in this kingdom, we have not yet gone into the way of ordering any compoſition, whoſe ingredients and preparation are not univerſally known to the faculty, but in place of it often uſe the following, or ſome other of a like nature, varying the proportions of the more active ingredients, according to the circumſtances of age, ſex, and conſtitution.

℞. Nitri pur. cretæ ppt. āā. dr. ſs.
Scammonii gr. xxiv.
Merc. dulc. ſexies ſublimati gr. iij.
Tartar. Stibiat. gr. j. ß. Fiat pulvis, probe terendo, in chartulas ſex æquales diſtribuendus. *

℞. Succ. limon. recent cum q. ſ. ſalis alcalini fixi accuratiſſime ſaturati, unc. ij.
Aq. Menth. v. ſimpl. unc. vj.
Sacch. puriſs. dr. ij. Fiat julepum.

To

* If there ſhould be reaſon to ſuſpect (what too often happens) that the Scammony is not found, the rad. jalapii muſt be ſubſtituted, or, if the patient is of a delicate habit, rhubarb.

To adults of middling degrees of ſtrength, one, or ſometimes two, of theſe papers of powder may be given in a little currant jelly, or any convenient ſyrup, and waſhed down with three or four ſpoonfuls of the julep.

If the ſtomach ſhould chance to be loaden with an acid or bilious ſaburra, even this ſmall doſe of the antimonial will prove emetic; and in ſuch caſes the vomiting muſt be encouraged, by drinking largely of a weak infuſion of the flor. chamæmeli, or equal parts of aq. alexeteria ſimplex and warm water, until it ſhall appear that the ſtomach is thoroughly cleared; after three or four hours reſt, another paper may be given, and repeated every ſecond hour, until a ſufficient number of ſtools ſhall be procured; all the while ſupplying the patient with proper drinks, namely, thin oaten gruel, barley water, or, what is uſually found to be ſtill more grateful, our common butter-milk whey.

If there ſhould be nothing offenſive, in either the ſtomach, or inteſtines, perhaps little or no vomiting or purging may enſue, but only a diaphoreſis, or poſſibly plentiful ſweat.

This method, if purſued in the proper time, will remove the complaints, in moſt caſes of ſimple fever; but if it ſhould not ſucceed, and we find the ſickneſs and oppreſſion ſtill continue, the heat, thirſt, and dryneſs of the ſkin increaſe, and the head-ach grow more diſtreſſing, while the ſick perſon can get no ſleep; then we muſt, unleſs the patient grows remarkably weak, and the

the pulſe ſinks, take away more blood; and if the head ſeems much loaded, it will anſwer beſt to take it from the feet; and both the powders and julep are to be continued, but not in ſuch doſes as to operate with violence, either upwards or downwards.

If the diſtreſs ſhall not ſubſide before the end of the fourth or fifth day, in conſequence of this ſcheme of management, but on the contrary the ſymptoms increaſe in violence, we may conſider the fever as eſtabliſhed, and prognoſticate that it will continue for ſome days longer; the number of which will vary according to different circumſtances: it is but ſeldom, however, that theſe can be ſo well underſtood, even by experienced practitioners, as to enable them to foretell with certainty either the event or duration of the diſeaſe: the prognoſis therefore muſt always be doubtful; for though matters ſhould be in ſuch a ſituation that one cannot ſay there are any ſigns which denote immediate danger, yet, while a fever is in being, we muſt conſtantly guard againſt pronouncing the patient ſafe, ſince it often happens, that the ſtate of the diſeaſe ſhall change ſuddenly, and acceſſory ſymptoms, the moſt alarming and fatal, ariſe when they are leaſt of all expected.

Simple continued fevers ſeldom run beyond the 14th day, and during this time we muſt endeavour to keep things in a moderate way, ſupporting the patient by ſheathing or ſubacid drinks, with ſuch thin diet as the ſtomach can bear and reliſh; and as to medicine, powders compoſed of magneſia,

or

or ſome other abſorbent, with nitre, or ſal polychreſt, and a due proportion of the antimonial, ſuch as ſhall not excite either vomiting or purging, together with an appropriate julep, like the one already preſcribed, or when we wiſh to promote a diaphoreſis, one made with ſp. mindereri, or which is vaſtly preferable, ſucc. limonum ſaturated with the volatile alcali. And ſhould the head become much affected, and the pain there grow very diſtreſſing, bliſtering between the ſhoulders, and bathing or fomenting the feet will bid fair to procure eaſe, and diſpoſe the patient to reſt.

Toward the cloſe of the fever, if the pulſe ſhould begin to flag, there will then be a neceſſity for ſomewhat to rouze Nature, and it will be proper to give wine-whey, wine and water, or ſometimes pure wine, inſtead of the drinks uſed in the beginning of the fever; in this ſituation alſo we may with propriety add ſome of the volatile alcaline ſpirits to the julep, or give with it a due proportion of the confectio cardiaca, formed into boluſes of a proper doſe. *

We may be aſſured of a favourable termination when we ſee the urine let fall a copious ſediment, while

* In England, the uſual mode of preſcription is to order ſeparate draughts, with boluſes and powders for every dose; whereas in this kingdom we generally direct juleps, and mixtures, of eight or ten ounces. Theirs is, without doubt, the more accurate method, but in many inſtances muſt prove too expenſive; perhaps a medium might be ſtruck out, which would leave it leſs in the power of the attendants to commit miſtakes in reſpect of the doſes, and yet not add greatly to the apothecary's bill.

while the pores of the ſkin give way to a plentiful and general ſweat, if the pulſe at the ſame time becomes full, ſoft, equable, and ſlow, and the patient after having ſlept, awakes in his perfect ſenſes.

But though all the ſymptoms may abate greatly, yet we are not to look on things as perfectly ſecure until the pulſe comes down from the frequency it had during the fever, to below even the healthy ſtandard; ſince it is ſeldom that the critical diſcharges are found ſufficient to carry off the fever all at once, but the force of the diſeaſe is firſt broken by an imperfect ſolution, commonly on the 11th day, and from that to the 14th it ſubſides gradually; the pulſe falling four or five ſtrokes in the day, till it gets even below the natural rate.

After the diſeaſe is fairly over, it is uſual, and indeed neceſſary, to give a doſe or two of ſome gentle cathartic, before the patient returns to his common courſe of living.

This is one way of treating a ſimple continued fever, but there is another (and if we believe but half the accounts that are given of its efficacy) vaſtly preferable, in reſpect to every thing on the part of the patient; the phyſician indeed, and more eſpecially the apothecary, perhaps may not think it altogether ſo eligible, ſince it may be put in practice without much of their aſſiſtance. It conſiſts in nothing more than bleeding repeatedly, according as the patient's ſtrength and the ſtate of the pulſe may require, and giving thin oaten gruel

gruel (decoctum avenaceum) ſweetened with honey, and from one to two drachms of nitre in each quart of this drink, which is to be taken ad libitum ; and there muſt be no attempt made toward puking or purging, leſt nature ſhould be diſturbed in her operations of concocting and diſcharging the morbific matter: the patients moreover are to be ſhifted with clean linen every day, and muſt not be ſuffered to lie in bed, only during the night ſeaſon ; all day they are either to be kept ſitting up, or at moſt allowed to lie on a couch with their cloaths on.

By this eaſy ſcheme of treatment, the late very celebrated De Haen (in his Ratio Medendi pars XIII.) affirms that not only ſimple continued fevers may be effectually cured, but alſo the putrid and inflammatory ſpecies ; he terms it the Hippocratic Method, and ſays it is founded on rules laid down by the venerable father of the medical Art: It may be obſerved however that there is no place in the works of Hippocrates where an explicit and poſitive ſcheme of treatment is laid down in reſpect of fevers, or indeed any other diſeaſe ; and we are beholden to the commentators for reducing his methodus medendi to any thing like ſyſtem. But if we are to form a judgment from the event, whatever might have been the ways in which Hippocrates treated his patients, his practice certainly was not always crowned with that ſucceſs, which the gentlemen, who ſtyle themſelves his followers, would make us believe conſtantly attends theirs ; for out of the forty-two celebrated hiſtories of fevers, which are

ſo

ſo graphically deſcribed in the firſt and third books De Morbis populariter graſſantibus, no leſs than twenty-five of the patients died; and in the number of other caſes, which are diſperſed through the remaining part of this diviſion of the Hippocratic writings, there are many deaths recorded. This liſt makes a very different appearance from thoſe which the moſt part of modern publiſhers of their practice are pleaſed to give us.

But it was formerly remarked, that Hippocrates is noted for the candour with which he relates all his hiſtories; and we hope his admirers have been cloſe imitators in this reſpect, and that implicit credit may be given to all their aſſertions.

Whatever mode of treatment may chance to be adopted, whether the former or the latter, when the fever baffles every attempt to prevent its being eſtabliſhed, and runs beyond the 14th day, it will ceaſe to be conſidered as a ſimple fever, as the ſymptoms in ſuch caſes will generally be more alarming and ſevere than thoſe which allow us to give it this denomination.

CHAP. III.

Deſcription and Method of Treatment of the continued inflammatory Fever.

THE *inflammatory fever* invades ſuddenly, with extreme coldneſs and ſhivering; and the circumſtances which may ſerve to aſſure us of its true nature are, a hardneſs, ſtrength, and fulneſs of

of the pulſe, beyond what is met with in any other ſpecies of fever; an exceſſive degree of heat, and of that particular kind, which, though it affects the touch very ſenſibly at firſt, yet ſeems to grow leſs violent the longer we hold our hand on the ſkin of the ſick perſon; exceſſive thirſt, with great dryneſs of the tongue and inſide of the mouth; total loſs of appetite, together with that of the ſenſes of taſting and ſmelling; ſevere pain in the head, and for the moſt part in the ſmall of the back; at the ſame time, fluſhing and fulneſs of the whole countenance, with redneſs of the eyes, and impatience of bearing the light; quick and laborious breathing, often attended with a dry cough; frequent ſtarting when the patients endeavour to ſleep, which they ſeldom attain, or if they lie quiet and ſeem to ſleep, it brings no refreſhment; this reſtleſſneſs and toſſing ſoon give riſe to a delirium, which, as the fever advances, becomes generally ſo violent, that it is with great difficulty the patient can be kept in bed; the ſkin, in general, is dry; the urine high-coloured, ſharp, and in ſmall quantities; with little or no diſcharge by ſtool.

Theſe ſymptoms and appearances ſhew, that in the true inflammatory fever there is a high degree of irritation in the vaſcular ſyſtem, great force exerted by the heart from the center, and great oppoſition made by the obſtacles to free circulation at the circumference.

Hence the obvious indications of cure muſt be to allay this irritation, bring down the force of the heart,

heart, and remove the obſtacles; ſo that the veſſels at the circumference being opened, the circulation may again become equable and free.

It will be in vain to direct our firſt attempts toward the correction of thoſe morbific matters, which are preſumed to keep up the irritation, and which, being intimately blended with the fluids, are not to be ſeparated or thrown off but by ſome proceſs of Nature, which Art has not yet been able to imitate; but we may poſſibly leſſen the force of the heart, and perhaps remove the ſpaſmodic conſtriction, or other obſtacle to free circulation, and thus ſtop the progreſs of the fever, before it has time to do any material injury to the craſis of the blood or texture of the ſolids.

Therefore, if called in at the beginning, we muſt in the firſt place endeavour to prevent the enſuing diſtreſs by large and repeated bleedings.

We ſhall eſtimate the quantity of blood to be taken away from the degrees of ſtrength and violence of the ſymptoms; but ſometimes it happens that the veſſels are oppreſſed by the ſuperabundant load of fluid, and there is ſuch a plenitude, that it overcomes their power; whence ariſes a falſe appearance of weakneſs, and unleſs the equilibrium be ſoon reſtored by bleeding, there will be great danger of a mortal ſtagnation.

Bleeding at the beginning of an inflammatory fever can never be diſpenſed with, for if then neglected, it is not to be compenſated by any thing that can be done in the ſubſequent ſtages of the diſeaſe. It is pointed out by Nature as an evacu-

ation the beſt adapted to check the impetuous motion of the blood, and relieve the tenſion of the fibres; for we often ſee this ſpecies of fever terminate by a ſpontaneous hæmorrhage, more eſpecially in caſes where bleeding has been neglected, or not ſufficiently inſiſted on in the beginning, which is the proper time; as bleeding in general is deemed improper, when the fever is advanced beyond the fourth or fifth day, ſince, it might then interrupt the concoction and ſeparation of the morbific matter, which, when the criſis takes place, is beſt carried off by ſweat, urine, or ſtool, and not by a diſcharge of blood: there are caſes, however, which will require a repetition of bleeding in the more advanced ſtages of the diſeaſe, and thoſe are in full and ſtrong habits, where the lungs are threatened with inflammation, which we may infer from the oppreſſion and great difficulty of breathing; or in caſes where the brain is in danger of being ſurcharged with a load of blood, which will appear from the ſevere pain of the head, accompanied with high degrees of delirium. In theſe circumſtances, bleeding at any time of the diſeaſe will be proper, and may poſſibly relieve the patient.

With reſpect to a repetition of the bleedings, the ſeaſon of the year, the habit of body, the manner of living, the difference of ſex, the age of the patient, the bulk and weight of the body, are all to be conſidered. Thus we find, that in ſpring, and in winter, and in northern climates, people bear bleeding better than they do in ſummer and autumn, or the hot countries. Firm muſcular ſubjects, and perſons inured to labour, bear and require bleeding

bleeding better than thoſe of oppoſite habits. Children and aged people do not bear bleeding well, nor do women in general.

The ancients, in theſe caſes, uſed to bleed ad deliquium, but modern practitioners do not puſh this remedy quite ſo far; the firſt bleeding ought nevertheleſs to be as large as the circumſtances juſt now mentioned will reaſonably allow, and if the pulſe ſhall be found, in ſix or eight hours, to be little or not at all ſoftened, and the febrile ſymptoms do not abate, it muſt be repeated a ſecond time, though not to the ſame quantity; or even a third time, if the ſymptoms continue to be urgent.

Proper evacuation having been made by bleeding, we are, in the next place, to try what can be done by antimonials in ſmall doſes, given as before directed, in the caſes of ſimple fever. If it be known from inquiry, or from particular ſymptoms, that the firſt paſſages are loaded, whether by acrid and indigeſtible remains of food, or by an accumulation of bile, it will be proper to puſh the operation of theſe ſo far as to excite diſcharges both upwards and downwards; but if no ſuch fulneſs or load of ſaburra be preſent, we may content ourſelves with bringing on the ſlighter degrees of vomiting and nauſea, and rather encourage perſpiration, by drinking freely of watery liquids moderately warmed; and at proper intervals, foment the legs and thighs with flannels wrung out of warm water.

If the means above propoſed have the wiſhed-for effect, in abating the violence of the ſymptoms, we are to hope for a favourable iſſue; nitroſe powders, with ſmall doſes of ſtibiated tartar and the ſaline julep, are nevertheleſs to be perſiſted in; and if they ſhould not keep the belly ſufficiently open, they are to be aided by cream of tartar whey, decoction of tamarinds, or ſmall doſes of ſal polychreſtum.

When it is found impracticable to interrupt the progreſs of the fever, or when we are called in too late to make the attempt, we muſt endeavour to moderate or aſſiſt the efforts of nature, according as they may appear too powerful or too weak, and wait in expectation of a favourable criſis, which, in the higher degrees of inflammatory fever, generally happens on the 7th or 9th day: ſometimes the ſymptoms are ſo extremely violent, that the patient either ſhall be carried off, or the fever terminate by a plentiful ſweat on the 4th or 5th day.

While we are waiting for this criſis, we muſt direct ſuch drinks and medicines as ſhall be cooling, diluent, and aperient, and tend to correct any thing acrid, which might keep up the irritation in the vaſcular ſyſtem; and in ordering theſe, we ſhould always contrive to make both the drink and the medicines as agreeable to the taſte of the patient as the nature of the caſe will allow.

The liquors moſt approved of are barley-water, thin oaten gruel, two-milk whey, weak wine whey mixed with Seltzer water, light infuſion of the roots

roots of gramen caninum, lemonade, currant jelly diſſolved in water, infuſion of wood ſorrel, or water poured on ſliced apples; but when the patients tire of one kind, we muſt indulge them, and change to another.

With reſpect to any thing more ſolid, it is very ſeldom that the patients have the leaſt deſire; when they have, the lighter kinds of panada, water-gruel, or barley-gruel, or a roaſted apple, are the only things that can be given with propriety, but they are never to be forced on the patient.

The room in which the ſick perſon lies ſhould be dark and cool, the air ſhould be moiſtened by ſprinkling water and vinegar, and ought to be allowed a free circulation; but care ſhould be taken that no ſtream of it come directly upon the patient. The common cuſtom of keeping the room hot, and heaping on bed-clothes, was intended to promote ſweating, but every thing that increaſes the heat hinders the diaphoreſis; for this reaſon there ſhould be no more clothes than uſual, and the curtains ſhould not be drawn, unleſs the patients incline to ſleep; neither are they in theſe inflammatory fevers to be kept conſtantly in bed, for this exhauſts the ſtrength, renders them more reſtleſs, and increaſes the head-ach and delirium.

While the ſymptoms run high, the medicines, as above-mentioned, ſhould conſiſt chiefly of palatable ſaline juleps, and powders of nitre, with ſome of the abſorbents, and due proportions of the antimonial.

Camphor

Camphor was formerly much cried up in inflammatory fevers, but at preſent ſeems rather falling into diſuſe; if given in ſmall doſes camphor produces no ſenſible effect, but if given to the quantity of a ſcruple or more, it uſually occaſions a particular kind of intoxication.

The ſeneka, or rattle-ſnake root, was alſo much in eſteem while the theory prevailed which ſuppoſed an inflammatory fever to ariſe ſolely from lentor.

It is too common a practice, that when the patient has been blooded two or three times, the pulſe nevertheleſs continuing hard and full, and a delirium ſupervening, to apply bliſters; but theſe never fail to increaſe all the ſymptoms that depend on diſturbance of the nervous ſyſtem; and if unluckily there ſhall be a load of hot ſtimulating drugs thrown in at the ſame time, the patient will have very little chance of eſcaping. Great care ſhould be taken not to apply bliſters too ſoon, while the fibres are tenſe and rigid, the heat very great, the ſkin dry, and the pulſe full, ſtrong and quick; but when the pulſe becomes ſoft, either in conſequence of evacuations, or in the courſe of the fever, bliſtering is often found of great ſervice, eſpecially when there comes on a ſtupor and lethargic diſpoſition, towards the ſtationary period.

It is uſual to bliſter firſt between the ſhoulders, then the legs, and in many caſes the head, when there is an appearance of the brain's being much oppreſſed. Bathing or ſtuping the legs and thighs, aſſiſts the operation of bliſters in relieving the head,

head, and therefore ought not to be omitted; neither ſhould we allow coſtiveneſs to continue, but keep the bowels open from time to time by clyſters, more eſpecially if bleeding has been neglected.

In theſe fevers there is generally an exacerbation in the evenings, but when they arrive at their height, and the criſis is near at hand, every power ſeems to be exerted to ſhake off the offenſive matter, and the ſymptoms all grow more violent and diſtreſſing.

The firſt appearance of a favourable termination is generally obſerved in the urine, by its letting fall a whitiſh ſediment; the veſſels of the ſkin alſo relax, the tongue grows moiſt, and ſoon after a plentiful ſweat breaks forth: if this happens on a critical day, and the patient, after a ſound ſleep, awakes with ſenſible refreſhment, while at the ſame time the head clears up, the thirſt ceaſes to be diſtreſſing, and the cruſts which covered the tongue begin to looſen, we may aſſure ourſelves that things will end well; though it may take ſome days before the febrile ſymptoms altogether ſubſide, and the pulſe comes to be ſlower than the natural rate; which is the circumſtance that gives perfect ſecurity, and authorizes us to pronounce the fever to be entirely over.

While nature is thus throwing off the diſeaſe, it will, for the moſt part, be of uſe to aſſiſt her efforts by ſomewhat of the cordial kind, of which nothing is more grateful and efficacious than wine; therefore, wine whey of different degrees of ſtrength,

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or wine diluted, or alone, muſt be given according to the exigencies of the caſe: but as it will alſo be requiſite to order ſomewhat in the way of medicine, we may direct boluſes of the pulvis contrayervæ comp: and confectio cardiaca, and add ſome of the volatile aromatic ſpirit to the ſaline juleps, which are to be uſed as vehicles.

But though in ſpite of all that has been propoſed, either in the beginning or during the progreſs of the fever, it ſhould ſtill go on without any appearance of a favourable criſis, yet we are not to abandon the caſe; ſince there are inſtances where a fever has baffled every thing that could be thought of, and the patient, when ſeemingly in the agonies of death, has been relieved by an unexpected effort of nature; therefore, according to Dr. Langriſh's rule, we are never to leave our patients for dead until they actually are ſo.

In the latter end of theſe inflammatory fevers, when the caſe grows deſperate, it is uſual to go on, applying bliſters, and giving different compoſitions of confectio cardiaca, volatile alcaline ſalts, camphor, and muſk; the laſt, mixed with the infuſion of valerian, is reckoned a powerful antiſpaſmodic, and is ſometimes of uſe in allaying the ſubſultus tendinum, and other convulſive motions that ariſe at theſe times.

It has been a practice alſo with ſome, to make an attempt on the bowels, either by means of James's powder, or the one that was preſcribed in the foregoing chapter; and there are inſtances where purging has appeared to ſave the patient; but

but the notion of diſturbing nature in her efforts to throw off the morbific matter, generally prevents the cautious phyſician from giving cathartics at theſe times.

If the ſkin ſhould ſtill continue dry, when the fever has got to the dangerous ſtage, it may be of uſe to try the warm bath, as there have been caſes where this has appeared to bring on a favourable criſis; but the want of a proper bathing veſſel, and the great difficulty of taking up grown perſons in the height of a fever, are the reaſons why practitioners ſo ſeldom think of trying this way of relief: a vapour bath, however which will anſwer full as well, or perhaps better, may be applied while the patient lies in bed. *

Such is the general ſcheme of treatment of a continued inflammatory fever, when in the higheſt degree; when the ſymptoms are leſs urgent, the bleedings, which are chiefly depended on for breaking the force of the fever, are to be made proportionally ſparing.

CHAP.

* The proprietor of the public baths in this city, has lately contrived a light bathing-tub, that can be carried with eaſe, into any appartment where it may be wanted; and his ſervants attend to apply vapour-baths when required.

Dr. Denman in a little pamphlet, entitled a letter to Dr. Huck, ſhews how a vapour-bath may be commodiouſly applied, without removing the patient from his bed.

CHAP. IV.

Deſcription and Method of Treatment of the Slow or Nervous Fever.

NERVOUS or *Slow Fevers* are frequently epidemic, after warm and moiſt weather, and prevail moſt in low damp ſituations: people who drink freely of wine are obſerved to be leaſt ſubject to this ſpecies, which was not known to the authors who wrote before the preſent century.

The nervous fever never attacks ſo ſuddenly as the inflammatory: the patient at firſt grows liſtleſs, feels weary, with light chills and ſhiverings, and uncertain fluſhes of heat. Theſe ſymptoms are always attended with a ſinking and dejection of ſpirit, and more or leſs of pain and giddineſs in the head; a nauſea and diſreliſh for every thing ſoon follow, but without any diſtreſſing thirſt. This nauſea is ſometimes increaſed ſo far as to produce retchings, which bring up nothing except inſipid phlegm. Toward night the complaints increaſe, the head grows more heavy, and the pulſe becomes quick, with an oppreſſive breathing, and frequent ſighing.

In this condition the patient often continues for five or ſix days, and the pulſe during this ſtage of the diſeaſe, is quick, weak, and unequal, ſometimes fluttering, then again ſlow and intermitting: the heats and chills are as uncertain as the pulſe, ſometimes a ſudden glow and florid colour in the cheeks, while the tip of the noſe and the ears ſhall be cold, and the forehead perhaps in a dewy ſweat. The urine

urine is commonly pale, often limpid, and ſometimes of the appearance of whey or vapid ſmall-beer, with a looſe kind of matter like fine bran ſcattered up and down, but not falling to the bottom of the glaſs.

The tongue at the beginning is ſeldom dry or diſcoloured, but ſometimes covered over with a thin whitiſh mucus; after the fever is formed and has continued for ſome days, the tongue will grow dry, red, and chapped; and however dry the tongue and lips ſeem to be, the patients have not ſenſibility enough to complain of thirſt.

By the time the patients have been confined in bed ſeven or eight days, the pain and heavineſs of the head become much more diſtreſſing and ſevere, and they are tormented with a noiſe and buzzing of the ears, which are the prelude to a delirium. The delirium however is ſeldom violent, or of the outrageous ſort, but rather a continual muttering to themſelves, and faultering in the ſpeech, which, as the fever advances, comes to be ſo altered that it is no eaſy matter to underſtand what they ſay, and in ſome caſes they loſe the power of pronouncing altogether.

Toward the twelfth day we ſhall frequently ſee profuſe ſweats break forth all at once, without bringing any relief; but, on the contrary, weakening ſtill more and more; and oftentimes, about the ſame period, looſe watery ſtools, which ſink the ſtrength apace. It is obſervable, that when the nervous fever proves fatal, it generally carries off the patients by the time they have been confined fourteen

fourteen days in their beds; if they can be ſupported to the twentieth, or thereabouts, they commonly eſcape.

We can expect nothing but a fatal termination, when we obſerve the ſtrength ſink ſo far, that the patients faint when they are raiſed up in the bed, while the extremities grow cold, the nails become pale or livid, and the pulſe ſo quick, that it may be ſaid to tremble and flutter rather than to beat. Soon after theſe appearances, we ſhall find them, from being exceedingly ſuſceptible of impreſſions, fearful and ſtarting at the leaſt noiſe, become quite inſenſible and ſtupid, ſo as to be ſcarcely rouſed by the loudeſt voice, or affected with the ſtrongeſt light.

The delirium now ends in a conſtant doſing; the ſtools, urine, and tears ſteal off involuntarily; a general convulſion enſues, and death ſoon cloſes the ſcene.

In theſe fevers, large crops of eruptions, of that kind termed Miliary, frequently ſtrike out on the neck, back and breaſt, in conſequence of the profuſe ſweats; but theſe are not to be conſidered as favourable, ſince they are very ſeldom critical, or ſuch as bring relief and ſhorten the fever. In general, there is ſeldom any thing, either in the way of eruption or diſcharge, that is completely critical in the nervous fever; for when the patients recover, they ſeem to ſleep off the diſeaſe, and the fever ſubſides gradually and imperceptibly, without critical ſweat or change in the urine.

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In ſome inſtances, theſe fevers run to a prodigious length, as far as ſix weeks; but when they do, they for the moſt part leave a degree of fooliſhneſs or idiotiſm after them, which does not wear off entirely for ſome months, until the ſtrength is perfectly reſtored.

From the deſcription that has been given, it will be eaſy to know the truly nervous fever, which, we ſee, conſiſts more in a diſorder of the nervous ſyſtem, than, like the inflammatory, in an intenſeneſs of motion in the vaſcular ſyſtem.

In the milder varieties of nervous fever which ariſe from different kinds of ſaburra, we are ſometimes able to prevent the dangerous ſymptoms, by an early exhibition of gentle emetics, and ſmall doſes of rhubarb; but when the diſeaſe is preceded by profuſe evacuations, or thoſe exceſſes which injure the tone of the living ſolids, we ſhall find ourſelves diſappointed in our attempts to ſtop the progreſs of the fever, which, when once fairly formed, will generally run its courſe in ſpite of all that can be done to interrupt it: the general ſcheme therefore muſt be to ſupport the patient, and obviate ſuch particular ſymptoms as may chance to create remarkable diſtreſs or danger.

When nervous fevers are epidemic, they ſometimes commence with ſymptoms in ſome degree like the inflammatory; and when we meet with ſuch caſes, and find the patient can ſpare blood, we may take away a few ounces; but in general we may lay down the rule, never to repeat it, ſince no diſeaſe bears bleeding worſe than the nervous fever: when there

there appears to be a great flow of blood to the head, we may then indeed order leeches to the temples, or apply cupping-glaſſes with ſcarification to the back part of the head.

At the beginning of the attack, there is ſometimes ſuch an oppreſſion and difficulty of breathing, that the diſeaſe may be miſtaken for an inflammation of the lungs, an error that may have fatal conſequences, if we imprudently attempt to relieve the patient by a large bleeding; but in the peripneumony, the breath is hot, accompanied with a cough and different degrees of pain, whereas in the nervous difficulty of breathing, there is no cough nor heat, the pulſe is ſmall and contracted, and the extremities cold.

At the commencement there is a neceſſity for gentle emetics, which theſe fevers bear well and require, to pump up the viſcid ſaburra: ſmall doſes of ipecacuanha will be more proper than emetic tartar, which might perhaps ruffle too much, and add to the diſorder of the nervous ſyſtem.

The inteſtinal canal ought likewiſe to be cleared; and therefore, if the emetic does not produce a number of ſtools ſufficient to carry off the load, let a mild doſe of rhubarb be given next day. This may poſſibly prevent the breaking out of aphthæ, which frequently occur in the courſe of this diſeaſe.

As theſe fevers run out to ſuch a length, there is a neceſſity for ſupporting the ſtrength of the patients by diet; therefore, although they ſeldom complain

complain of thirſt, and have no deſire to eat, yet care ſhould be taken to make them drink frequently, though not in ſuch quantities as in the inflammatory fever: wine is allowable, and is obſerved to be of great uſe in keeping up the ſtrength; good old ſound claret is the beſt, and may be made into whey, or diluted with water, according to the ſtate of the pulſe and other circumſtances, which may require the drinks to be either ſtronger or weaker; thin chicken broth, or beef-tea, or panada and light jellies may be allowed.

When we find the pulſe grow ſoft and full upon the uſe of wine, it may be indulged to a conſiderable quantity: it has been known to allay the delirium and procure ſleep in theſe fevers, and has been taken with ſucceſs to the quantity of ſome quarts in the courſe of twenty-four hours; the indications for giving it with ſuch freedom are, when we find the pulſe ſoft and low, and the patients in a comatoſe delirium.

It is not uncommon in theſe caſes, for the patients to long exceedingly for cold water, and when they do ſo, they may be indulged, as it is only in caſes of topical inflammation that danger may enſue from cold drinks.

As great relief in nervous fevers may be expected from bliſters, they ought to be applied early; if applied even before the diſeaſe is ſo far advanced as to confine the patient in bed, ſo much the better; for ſhould we wait until the nervous ſyſtem comes to be greatly diſturbed, and the ſenſes of hearing, feeling, and ſeeing grow more acute than natural,

ral, then bliſtering will add to the ſtimulus, and increaſe the diſtreſs; therefore, if bliſters are not applied in the beginning, they ſhould be delayed until ſome degrees of inſenſibility come on. They ought firſt to be applied to the legs, and ſhould not be allowed to lie on longer than is neceſſary to produce their effect, and when cut, the cuticle is not to be peeled off, nor acrid plaiſters applied. When ſtupor and drowſineſs demand the uſe of bliſters, let them be laid to the head. Theſe ſymptoms will ſometimes be relieved by ſynapiſms; but if theſe applications are obſerved to be too ſharp and ſtimulating, and the patient frequently pulls up the feet, they ought to be removed, and their places ſupplied by poultices of bread and milk, or ſome other emollient application.

If a remiſſion ſhall appear after the fever has continued for a week or longer, the bark will be found of great ſervice, and an infuſion of it in claret, will be the moſt efficacious form. The bark will be of uſe in preventing the tendency to mortification, which is often obſervable towards the cloſe of theſe fevers, in the places where bliſters have been applied, or in the parts which ſuffer by preſſure from lying ſo long in bed. The bark alſo ſtops the colliquative ſweats: when it does not ſit well on the ſtomach, it may be given in clyſters.

If convulſions ſupervene, muſk is the medicine chiefly to be depended on: it ſhould be given from ten grains to a ſcruple in each doſe, if we expect it to do ſervice, and the beſt vehicle will be infuſion of

of valerian; saffron, once esteemed so great a cordial, is found to have no sensible virtue of this sort, as it may (if we believe late experiments) be given to the quantity of two drams without producing any change with respect to the pulse.

The diarrhœa, which frequently occurs, and generally wastes the patient, ought if possible to be checked; this however, is what we are seldom able to accomplish. The decoctum album, with a proper quantity of red port wine, will be a proper drink in these circumstances, and we may try what can be done by the use of a mixture with the pul. e bolo comp. in cinnamon water.

When aphthæ appear, they are often accompanied with ulcerations in the throat; in order to cleanse these, and make the swallowing easier, we must direct a gargle of decoction of figs, with mel rosaceum, and a little tincture of myrrh. If the swallowing be nearly obstructed by the load of viscid phlegm, we must attempt to gain relief by gentle emetics of ipecacuanha; or if these do not operate sufficiently, small doses of the emetic tartar.

CHAP. V.

Description, and Method of Treatment, of the Putrid Continual Fever.

THE fourth species of continued fever hath its denomination from the depraved state of the

fluids, which are either corrupted previous to the diſeaſe, or quickly paſs on to the putreſcent ſtate.

This ſpecies, before Dr. Langriſh's time, had been always confounded with the nervous; and though inflammatory fevers, toward the cloſe, often ſhew the craſis of the blood to be deſtroyed, yet we are not to blend them with this, wherein, from the very beginning, there is ſome peculiar acrimony, which diſſolves the bond of union among the inſenſible particles, and allows them to run into combinations oppoſite to the mild, ſmooth, and balmy nature of blood in the healthy ſtate. The blood, when thus diſſolved, often tranſudes, and runs off by actual hæmorrhage, or mixes with the lymphatic juices and mucous ſecretions.

The morbific matter which gives riſe to putrid fevers, appears in ſome caſes to be generated gradually within the body, and is deemed the conſequence of feeding on ill-cured animal food, without a ſufficient quantity of ſound vegetables to correct the putreſcent tendency.

At other times, putrid fevers are caught by infection, and are cauſed by thoſe ſubtile matters termed Miaſmata, which take their riſe in different ways, and are capable of being conveyed to diſtant places.

It was obſerved on a former occaſion, that we muſt confeſs our ignorance of the intimate qualities of the various kinds of ſubtile matter which produce the different ſpecies of fevers, as well

well as ſome other diſeaſes; neither can we explain the manner in which theſe miaſmata change the healthy ſtate of the blood, nor give any more ſatisfactory account, than by likening them to ferments, which excite different degrees and kinds of inteſtine motion, among the inſenſible particles of the fluids with which they happen to be mixed.

The diſtinguiſhing ſymptoms of a *Putrid Fever* are degrees of weakneſs, oppreſſion and nauſea, more remarkable either from the firſt attack, or very ſoon enſuing, than what we meet with in any other ſpecies; and this extreme and ſudden proſtration of ſtrength is, for the moſt part, accompanied with as remarkable a deſpondency, or dejection of mind; or, which is ſtill more alarming, with an uncommon degree of inſenſibility and want of apprehenſion.

Though putrid fevers ſometimes come on gradually, with complaints of languor, loſs of appetite, nauſea, and a dull pain in the head; yet they are always more violent and ſudden in their attack than nervous fevers, though ſeldom ſo much ſo as thoſe of the inflammatory ſpecies.

When the fever abſolutely begins, it attacks with coldneſs and ſhivering, accompanied with nauſea and vomiting, vertigo, or giddineſs in the head. This ſenſation of exceſſive cold, as was formerly explained, is ſoon changed into exceſſive heat; but the heat at firſt is not ſo great as in the inflammatory fever, though it increaſes daily, and ſometimes gives the ſenſation of ſmarting to the fingers of thoſe who feel the ſkin of the ſick perſon.

In many cafes, putrid fevers begin with falfe appearances of inflammation, the pulfe being full and ftrong; but it foon changes, efpecially after bleeding, and fometimes finks fo much, that we are never able afterwards to raife it; hence, in all fevers, where we find the ftrength to fail remarkably from the firft onfet, we are to be extremely cautious about the quantity of blood to be taken away, as this extraordinary weaknefs is an infallible fign of the putrefcent diathefis.

Befide the giddinefs and confufion of the head, there is often a fevere pain in one or both eyebrows, and at the bottom of the focket; the eyes at the fame time appearing full, heavy, and, as it were, inflamed; which rednefs, however, is more owing to the lymph's being tinctured, from a diffolution of the blood, than from an inflammatory diftenfion of the veffels; at other times, the eyes have a yellowifh caft, owing to the fame diffolution, and not, as in a jaundice, to the reforption of bile.

The tongue, though only whitifh and moift at the beginning, grows daily more dark coloured and dry, until at length it becomes almoft quite black; and this blackifh tinge has been known to continue for fome days, even after the fever has terminated by a favourable crifis. The thirft at firft is but moderate, but increafes daily as the fever advances; no kind of drink pleafes, but all feem either bitter or maukifh. When the cafe grows very bad, the patient lofes the fenfe of thirft, notwithftanding the tongue, together with the lips and

and teeth, are at this time parched up, and covered with dark coloured ſordes.

The nauſea and oppreſſive ſickneſs never abate; and we ſhall often obſerve the patients to fetch deep heavy ſighs, and ſeem, as it were, to pant for breath.

The ſtate of the pulſe is various, eſpecially in caſes where the fever ariſes from infection, for the morbific matter will produce a conſiderable diverſity with reſpect to diſorder in the vaſcular ſyſtem, according as it happens to take place in ſtrong athletic habits, full of blood, and in weak exhauſted ſubjects with poor watery fluids.

The urine is equally various with the pulſe, depending on diverſity of conſtitution likewiſe. In caſes where the putreſcent diatheſis is very prevalent, the urine is crude, and often very offenſive in its ſmell.

When the fever ſets out with ſymptoms of inflammation, the belly is bound at the commencement of the diſeaſe; but where the diſſolution of the blood is great from the firſt, it is common to ſee a looſeneſs ſoon come on, and the ſtools prove extremely fœtid.

Toward the cloſe, ſometimes much earlier, in many caſes of putrid fever, the ſkin ſtrikes out in reddiſh, purple, or livid ſpots of different magnitudes, which ſeldom or ever bring any relief from the oppreſſion, ſickneſs, and other diſtreſſing ſymptoms. The nearer they approach to a livid or blackiſh colour, the more alarming their appearance,

appearance, while, on the contrary, when they continue of a brighter red, the more favourable the prognoſtic.

Miliary eruptions alſo frequently appear toward the twelfth or fourteenth day, and ſucceed the profuſe ſweats, which are not uncommon about this period of the fever. Theſe are ſeldom of a more ſalutary nature than the petechiæ.

Aphthæ appear on the tongue and inſide of the mouth; and ſoon after they ſhew themſelves, there is generally more or leſs of a putrid ulceration in the fauces, preying upon the tonſils, which ſometimes comes to be ſo ſevere as to hinder ſwallowing, and thus haſten the fate of the patient.

Though theſe eruptions hitherto mentioned can never be conſidered as benign, yet it is obſerved, that when ſcabs appear about the noſe, lips, and corners of the mouth, it is a favourable ſign, and affords hopes of the patient's recovery.

The pain, heavineſs, and confuſion of the head which are among the firſt ſymptoms, are ſoon followed by delirium, different in degree in different ſubjects, in ſome, accompanied with toſſing and reſtleſſneſs, in others with a doſing and lethargic diſpoſition; and it is obſervable, that in theſe caſes, where the patients are in this comatoſe ſtate, the pulſe is ſometimes not quicker, weaker, nor more irregular than in time of perfect health.

The time of duration of putrid fevers is very different; in the worſt kind, the perſons ſeized frequently die within the compaſs of the firſt week, but more commonly they hold out to the

end

end of the ſecond; when they get over three weeks, the patients uſually recover, and there are inſtances of putrid fevers running ſo far as ſix weeks; theſe, however, muſt have been ſuch as have not been attended with a putreſcent ſtate of the fluids from the firſt attack.

We may entertain hopes of a favourable iſſue, when the pulſe grows ſtronger, and more equable; when the ſenſes begin to clear up, and warm ſweats in moderate quantity break out, and the patient lies under them without toſſing or raving, the urine at the ſame time ſhewing marks of concoction by depoſiting a whitiſh ſediment.

But if the pulſe ſinks, and withal grows more quick and intermittent; tendons ſtart, tongue faulters, features change, and the ſick perſon lies on his back in a comatoſe ſtate; ſlides down in the bed, and is conſtantly fumbling with his fingers, and picking about the bed-clothes; if cold clammy ſweats break out, and the urine or fæces come away involuntarily, the hypochondria being tenſe, and the extremities cold, we may conſider the caſe as deſperate.

If called in at the beginning, we are to endeavour to prevent the fever from forming, and muſt try what can be done, by firſt taking away ſome ounces of blood, in ſuch caſes as ſhew ſigns of ſtrength, and tendency to inflammation; and then, giving the febrifuge powder in ſmall doſes, repeated every ſecond hour, until it ſhall either puke, purge, or throw the patient into a plentiful ſweat; but when we obſerve ſigns of great weakneſs from the

the very firſt attack, and the circumſtances of the caſe are truly ſuch as will not bear bleeding, then we muſt have recourſe to the powder alone, but not puſh its operation ſo far as to excite profuſe diſcharges, which might poſſibly ſink the patient.

If the febrifuge powder ſhould not paſs downwards, it will be proper to give ſome gentle laxative that ſhall produce this effect; but we are to be guarded in the uſe of ſudorifics, and not run haſtily into the adminiſtration of ſtimulants, ſuch as the contrayerva, or ſnake-root, nor the volatile alcaline ſalts and ſpirits. The latter, in the opinion of Dr. Huxham, add fuel to the fire, and tend to increaſe the putreſcent diatheſis; but Sir John Pringle is leſs afraid of them, as his experiments ſhew them to be antiſeptic.

Bliſters are ſeldom obſerved to be of uſe in the beginning of a putrid fever, though that is held to be the beſt time for applying them in the nervous; but in the latter ſtages, and when the patients begin to grow comatoſe and inſenſible, then bliſtering is often followed with happy effects.

But there is one medicine which has been found to contribute greatly to the recovery of perſons labouring under putrid fevers, and that is, the Peruvian bark: this hath been affirmed to preſerve the patient, even when the blood has been ſo far diſſolved, as to make its way through the coats of the veſſels, and run off from many parts of the body; being doubly uſeful, as a ſtrengthener to brace up the debilitated fibres, and as an antiſeptic to correct the putreſcent ſtate of the fluids.

In

In many other fevers (as we ſhall ſee hereafter) we are obliged to wait for an intermiſſion, or at leaſt a remiſſion, before we venture to adminiſter the bark; but in theſe malignant and highly putrid fevers, it muſt be given as ſoon as we are convinced of the diſſolution of the blood, from the numerous petechiæ, or from the hæmorrhages; and we cannot err, in giving it in as large doſes as the ſtomach can poſſibly bear; a very ſtrong decoction is the uſual, and the moſt commodious form.

It will be proper alſo in theſe caſes of hæmorrhage to give the vitriolic acid along with the bark; and, if this ſhould not check the bleedings, alum, to the quantity of eight or ten grains, with two or three of powdered nutmeg, every fourth or ſixth hour, may be tried.

The ſtrength at the ſame time is to be ſupported by wine; and if there be any appetite, the patient ſhould be fed with gruel or panada, ſharpened with the juices of ſubacid fruits; or ſhould be indulged with the fruits themſelves, when theſe are procurable, and in ſeaſon.

The drinks in general ſhould be of the ſubacid and antiputreſcent kind, lemonade, rheniſh wine, or old claret, diluted with water, will be extremely proper; or, when the patient tires of theſe, wine-whey of different ſorts.

The air of the ſick-room ſhould be kept as pure and as well ventilated as circumſtances will allow; the floors ſhould be ſprinkled with vinegar, and aromatic herbs ſtrewed all about; the linen of the patient,

patient, and the ſheets of the bed, ſhould be often ſhifted, and the ſick perſon ſhould be taken up, as often as the ſtrength will allow. But ſome practitioners carry this matter ſo far, as to take the patients out of doors, and expoſe them for hours to the open air; and aſſure the public that this practice is crowned with aſtoniſhing ſucceſs.

Theſe are the general methods of managing a putrid fever; but we are to vary and adapt them to the different likings and circumſtances of the patient, and endeavour to ſupport the ſtrength, and aſſiſt Nature in ſubduing or expelling the morbific matter. This expulſion is ſometimes the occaſion of abſceſſes in the parotid, axillary, or inguinal glands. And ſometimes an exceedingly acrid and cauſtic matter ſhall ſettle on the legs, and produce a ſudden mortification, or perhaps about the os ſacrum, where the parts from continual lying are irritated, and ſolicit the afflux of an acrimonious humour, that ſoon mortifies the teguments, and forms thick ſloughs, which, when they caſt off, leave deep and ſpreading ulcers; but theſe caſes happen oftener in hoſpitals than in private practice.

The cortex, in theſe circumſtances, is the thing we are chiefly to depend on for promoting the ſeparation of the mortified parts.

There are certain diſtreſſing ſymptoms which occur frequently in the courſe of theſe fevers, and demand particular attention.

If a profuſe diarrhœa ſhould ſupervene, and threaten to ſink the patient, we are not to think of

of reſtraining it all at once; ſince, even if that could be accompliſhed, it would not be adviſable; the moſt proper ſcheme therefore will be, to try, by very ſmall doſes of ipecacuanha, repeated every third or fourth hour, to promote a diaphoreſis, and by that means relieve the bowels.

Violent vomiting may be reſtrained by ſal abſinthii, or ſome other mild fixed alcaline ſalt, mixed with juice of lemons, and ſwallowed during the effervescence. * This is uſually termed the Antiemetic Mixture, and is preſumed to correct the colluvies in the ſtomach and flexure of the duodenum, and thus may be of uſe in removing part of the ſource of the fever; therefore, in caſes where there is great nauſea, and ſigns of putrid ſaburra, theſe antiemetic draughts, repeated every third, or fourth hour, or perhaps oftener, will bid fair to ſhorten the diſeaſe.

It is not uncommon, after putrid fevers, to ſee the patients become dropſical, or have œdematous legs;

* It was mentioned in a former note, how often the intentions of the phyſician are apt to be fruſtrated, by the impoſition of the druggiſts, in frequently vending a cauſtic alcali for ſal abſinthii, which renders it incumbent on the apothecary, as often as theſe mixtures are preſcribed, to ſee that his alcaline ſalt is really mild, and capable of effervescence when mixed with the acid juice. About a ſcruple of the ſalt to a table ſpoonful of lemon juice, is the uſual doſe; but as theſe ſalts run quickly into the liquid ſtate, if expoſed to the air, the moſt eligible way of ordering the antiemetic draughts, is to direct the requiſite proportion of alcali to be diſſolved in as much of any pleaſant diſtilled water, or other grateful vehicle, as ſhall leave twenty grains of ſalt to two ſpoonfuls of ſolution; theſe, mixed with one ſpoonful of lemon juice, will conſtitute the doſe.

legs; but theſe complaints are to be removed by ſtrengtheners, and not by purging, as in other dropſical caſes. Where the bark has been freely uſed, ſuch ſwellings ſeldom happen.

When the fever is completely over, it will be proper to exhibit a lenient purge or two, leſt any offenſive matter ſhould accumulate again in the firſt paſſages, and endanger a relapſe. Care ſhould alſo be taken to recover the tone of the viſcera, by the means of light and eaſily digeſtible food, taken in moderate meals; and by aromatic bitters, ſuch as the calamus aromaticus, orange-peel, and camomile flowers, made into proper infuſions, together with the uſe of chalybeate waters. And if any fears ſhould be entertained, that the infection may remain in the apartments of the ſick, let the rooms be well fumigated with ſulphur.

MIXED FEVERS.—Thus we have gone through thoſe ſpecies of continued fever, which are ſo diſtinctly marked, that we can give them a determinate appellation; but, as was formerly obſerved, there are violent fevers which occur in practice, wherein the ſymptoms are ſo blended, that it is difficult to ſay what ſpecies they belong to, and therefore we are under the neceſſity of terming them Mixed Fevers.

The method of cure in all caſes of mixed fever muſt be regulated according as the diſeaſe ſhall be found to tend moſt to the inflammatory, to the nervous, or to the putrid; and, conſequently, we are to adopt the antiphlogiſtic courſe; purſue the ſtrengthening and antiſpaſmodic ſcheme, or the ſtrength-

ſtrengthening and antiſeptic; according as we ſhall happen to find the ſigns of inflammation, of nervous diſturbance, or of putrefactive diatheſis, to prevail moſt.

CHAP. VI.

Varieties of the inflammatory, nervous, putrid, and mixed Species of Fevers.

IN reſpect to ſome diſeaſes, particularly thoſe of the chronic ſort, it is generally ſufficient, for all the purpoſes of practice, if the phyſician diſtinguiſhes the *Genus*; but in acute caſes, eſpecially fevers, it will always be neceſſary to mark the *Species*, and very often requiſite to note the *Varieties* of theſe ſpecies.

The reader who is not already converſant in buſineſs, may perhaps imagine that he will meet with caſes that ſhall exactly correſpond in every circumſtance with the deſcriptions of the inflammatory, nervous, and putrid fevers, that have been juſt now laid down in the three preceding chapters; no ſuch thing however will happen: theſe deſcriptions are chiefly compiled from Langriſh, * and Huxham, † both writers of acknowledged merit, and who are univerſally allowed to have treated extremely well of the diſeaſes now under conſideration; but neither of them had the leaſt idea of the ſyſtematic method of diſtinguiſhing

* Modern Theory and Practice of Phyſic.

† Eſſay on Fevers.

ing things; and though what they have done is fully ſufficient to enable us to diſcriminate the ſpecies, yet they want thoſe minutiæ which are requiſite for marking out the variety; and the caſes which actually occur in practice, will be found to be varieties of the different ſpecies of continued fever.

This, however, is the general way of deſcribing diſeaſes, with almoſt every other writer, excepting Sydenham; he, indeed, was well aware of the importance of making theſe diſtinctions, and hence it is that his hiſtories will be read with pleaſure to the end of time, while thoſe of the common run of authors will in their turns ſink into oblivion: this attention to the minute circumſtances, that vary the appearance of the diſeaſe, is what has ſtampt the approbation of all ſucceeding ages, on the hiſtories of fevers, which are handed down in the Hippocratic writings; and it is from the want of it that we ſo often hear the experienced practitioner complaining of the compilers of medical books, that the diſeaſes which they deſcribe are ſeldom or ever to be met with when he comes to the bed-ſide of a ſick perſon.

Sydenham was particularly happy in this reſpect, and if all the other writers who have attempted to deſcribe fevers, had been as minute, and accurate in their diſtinctions, we ſhould probably have been enabled, before this time, to refer the ſeveral varieties to their reſpective ſpecies and genera, and conſequently make out a complete hiſtory of this order of diſeaſes. But the medical

medical world muſt wait, till the ſyſtematic method of arrangement is completely underſtood, and followed, before it can expect to arrive at ſuch perfection.

It has been already remarked of Sauvages, that, for the moſt part, he conſiders that as a ſpecies, which ought only to be claſſed as a variety; and thus has multiplied both his genera and ſpecies, beyond all reaſonable bounds; but leſt we ſhould alſo give a diſtaſte to the ſyſtematic method, by a too tedious catalogue, only the moſt material and uſeful diſtinctions of ſpecies have been adopted, and no more varieties ſhall be inſerted than appear neceſſary for the knowledge of the young practitioner. For the remainder, we ſhall refer to Sauvages's Noſologia, and Dr. Cullen's Synopſis.

The varieties of inflammatory fever, moſt worthy of notice, are the following:

1. *Febris inflammatoria cephalalgica*; beſides the ſymptoms of inflammation diſtinguiſhing the particular ſpecies of fever, this is attended with a moſt excruciating pain of the head. To relieve which, large and repeated bleedings are neceſſary; the head muſt be cloſe ſhaved, and bathed in vinegar; the legs ſtuped with a warm fomentation, and bliſters applied to them; and if theſe ſhall not be found to produce good effects, ſinapiſms to the ſoles of the feet.

2. *Febris inflammatoria ſoporoſa*; diſtinguiſhed by a conſtant ſtupor and drowſineſs, which require a ſimilar ſcheme of treatment with the foregoing, with the view to relieve the veſſels of the brain that

that appear to be overloaded; bliſtering the occiput, or whole head, will often be found neceſſary.

3. *Febris inflammatoria pleuritica*; wherein a ſtitch of the ſide gives diſtreſs. The pain is not ſo ſevere nor ſo deeply felt as in the genuine pleuriſy, neither is the breathing ſo difficult, and there is no coughing nor expectoration. This ſtitch will be relieved by bliſtering upon the affected part.

4. *Febris inflammatoria rheumatica*; nearly allied to the former, only here the pains are more general, and affect the joints, limbs, and fleſhy parts of the body. Large doſes of nitre are affirmed by Dr. Brockleſby to have produced the happieſt effects in this diſeaſe. (See his Oeconomical and Medical Obſervations.) The urine in this fever is ſometimes found ſo replete with ſalts, that they chryſtallize and adhere to the ſides of the glaſs, or float on the ſurface of the urine.

5. *Febris inflammatoria dyſenterica.* The dyſenteric fever, attended with dry gripes, deſcribed by Sydenham, was very frequent during certain ſeaſons that the dyſentery raged. The cure conſiſted in gently ſoliciting the diſcharge of the irritating matter, and carrying it off by ſtool.

The true *Inflammatory Fever* is a diſeaſe very rarely ſeen in Dublin; *Nervous Fevers* are much more frequent, but we are not enabled to ſubjoin any varieties, as the authors who have written concerning them, have at moſt only deſcribed the ſpecies; but any perſon converſant in practice may readily perceive that there are varieties

rieties which an obſerver ſuch as Sydenham was, would not have failed to remark, had the nervous fever occurred in the courſe of his practice.

In particular, the diſeaſe which Dr. Whytt has deſcribed ſo accurately under the name of the Internal Dropſy of the Brain, appears to be a nervous fever, and might rather be termed the *Hydrocephalic Fever*, as the appellation of Dropſy gives an idea of a chronic diſeaſe. We may therefore conſider this as a variety, diſtinct from the *febricula*, or *febris nervoſa communis*. It is peculiar to young ſubjects, and is the moſt deceitful perhaps of all the febrile diſeaſes; beginning, for the moſt part, like a common worm fever, with ſlight anomalous ſymptoms; for which reaſon it is recommended to practitioners to read Dr. Whytt's deſcription with due attention, otherwiſe they will be exceedingly ſurprized to ſee their patients fall into convulſions, and expire in a few hours, when there have been none of thoſe preceding appearances, which uſually ſerve to foretell ſuch a fatal termination. The pulſe, from being ſmall, hard, and exceedingly frequent, becomes full, ſoft, and ſlow, but *intermittent*; and this is one of the circumſtances which point out the fatal change that we are ſoon to expect: other appearances are often flattering, and ſuch as promiſe ſecurity; the patients ſeem to feel little pain or diſtreſs; are not delirious; have no great thirſt; nor much more heat than what is natural; and are ſo free from oppreſſion, and ſickneſs at the ſtomach, that they have been known to ſpeak cheerfully, and even to eat with an appetite

within a few hours of the convulsive attack, which carries them off.

We also recommend the perusal of an excellent paper on this disease in the 4th vol. of the London Medical Observations, by Dr. Fothergill, and another by Dr. Watson. Both these gentlemen lament that they had never seen a patient emerge; but a very eminent and experienced physician of this kingdom (Dr. Haliday of Belfast) in a letter to the author, (Jan. 1772,) having occasion to mention the *hydrocephalus internus*, puts the query, *Is this disease ever removed?* and adds, "Certain "it is, that no child could have more evident "symptoms of it, than a little one of Mr. ——, "whom I visited about a month ago; vomiting "in the beginning, perpetual stupor afterwards, "with a slow pulse and respiration, pupils astonishingly dilated, and a total loss of vision; yet "he emerged. His head was blistered, acrid cataplasms were afterwards laid to the feet, and he "was largely purged with calomel and jalap. He "is now perfectly well."

This appears to be the rational scheme of treatment, and if there be a possibility of a resorption of the serum, may perhaps sometimes succeed.

The author himself once had the care of a boy about four years old, where the symptoms were nearly similar, and who escaped after very violent purging, by means of calomel, and *resin* of jalap; as the bowels had been so insensible to every thing before tried, that it was deemed proper

proper to venture even on this draſtic purge. He alſo was concerned in another caſe, (about a year and half ago) of a beautiful little girl, who had all the apparent ſigns of water in the head, and was actually deſpaired of; yet emerged without taking any thing from the apothecary's ſhop: what ſeemingly reſcued her, (after many ineffectual attempts had been made for her relief) was drinking largely of claret; this chanced to be given, at firſt, by meer accident, and on finding evident ſigns of amendment, the parents were encouraged to increaſe the quantity to a pint; ſhe continued to drink a few glaſſes daily for ſome months, until her health appeared to be completely re-eſtabliſhed. Theſe caſes have been mentioned, to encourage practitioners in the hope that ſome method of treatment may poſſibly be found out, that ſhall prevent the fatal termination of a diſeaſe which unfortunately is but too frequent.

Putrid Fevers are ſtill more frequent than the *Nervous*, and in ſome ſeaſons epidemic in Dublin; of this ſpecies ſeveral varieties have been obſerved and deſcribed by different writers. Of which the principal are,

1. *Febris petechialis*; the petechial, or ſpotted fever. The nature of the petechiæ which give the name to this variety of putrid fever, have been explained, and the inferences to be drawn from their appearance, pointed out in the former volume. The methodus medendi requires nothing peculiar, and is to be conducted according to the

plan above-mentioned, when treating of the ſpecies. Petechial fevers are ſometimes epidemic in Dublin, and there are few ſeaſons wherein they are not frequently ſeen; eſpecially among that part of the inhabitants who live in confined and not well-ventilated ſituations.

2. *Febris carceraria*; the jail fever, ſo well deſcribed by Sir John Pringle. (See his Obſervations on the Diſeaſes of the Army.) The miaſmata are generated in places of confinement, where numbers of people being crouded together, and the air ſeldom renewed, noxious ſteams ariſe from filth of various ſorts. Except by a tremor of the hands, the diſeaſe is not eaſily diſtinguiſhed in the beginning from any common fever. As the fever advances, the patient complains of great laſſitude, nauſea, pain in the back, and confuſion of the head, with an uncommon dejection of ſpirit. At this time the pulſe is not ſunk, but beats quick, and often varies in the ſame day as to ſtrength and fulneſs. If bleeding happens to be incautiouſly adminiſtered, the pulſe ſinks irrecoverably, and in every caſe, independent of evacuations, it ſooner or later ſinks, and then gives certain indication of the malignity of the diſeaſe.

The method of cure that was found moſt ſucceſsful, conſiſted in giving ſmall doſes of emetic tartar in the beginning, but in the more advanced ſtate, and toward the cloſe of the fever, the cortex with wine, and radix ſerpentariæ were freely adminiſtered.

In

In the month of February 1776, a *jail fever* broke out in Dublin, and greatly alarmed the city: it was communicated by the priſoners, during the week that the trials were carrying on. The jail for felons, which is a little, naſty, confined place, cloſe by one of the public markets, where there is ſlaughtering always going on, had been unuſually crouded; though it was affirmed that there was no uncommon degree of ſickneſs among the priſoners at the time the infection manifeſted itſelf; in attacking both the ſheriffs, ſome of the lawyers, and ſeveral other perſons who had occaſion to attend the court at this time, to the number of thirty-three, of whom ſeventeen died.

The ſymptoms of the fever anſwered to the deſcription given by Sir John Pringle; and thoſe who eſcaped had large evacuations by ſtool, of blackiſh bilious ſtuff. The delirium, (except in one or two caſes, where it turned out extremely violent and of theoutrageous ſort) was of the low muttering kind, the patients lay quiet, and ſeemed as if entranced with their eyes ſtaring, and fixed on ſome viſionary object. One man, who recovered, had buboes formed in the arm-pits, which came to a ſuppuration and apparently ſaved his life. After a little time, the diſeaſe entirely ceaſed; and we have ſince heard no more of it: indeed ſome attention has been paid to the cleanſing of the jail, as well as waſhing and new-cloathing the priſoners, previous to their being brought to trial. *

3. *Febris*

* The above is given on the authority of the two very eminent phyſicians (whoſe names every body in Dublin knows) who attended the greateſt part of the perſons who were ſeized; and took pains to obtain accurate accounts from other gentlemen who ſaw the remainder.

3. *Febris maligna Hungarica.* A very deſtructive fever that aroſe among troops encamped in a marſhy ſoil. Extreme weakneſs was the predominant ſymptom; the heat of the body not ſenſibly increaſed; the pulſe exceſſively quick, uneven, and ſo weak as ſcarcely to be felt; the breathing ſtraitened and oppreſſed; the mouth dry, but little complaint of thirſt; urine various without ſediment; great reſtleſſneſs, anxiety, and delirium.

4. *Febris maligna Ægyptiorum*, deſcribed by Proſper Alpinus. Began with vomiting, pain in the ſtomach, and anxiety, followed by fetid ſtools; heat of the body not more than natural; the tongue rough, dry, and black, but no complaint of thirſt; pulſe and urine like to thoſe of people in health.

5. *Febris icteriodes Carolinenſis*, or yellow fever, deſcribed by Dr. Lining, as raging in South Carolina from Auguſt to October 1748. It was a moſt violent putrid fever, wherein the blood was ſo diſſolved as to run off by all the natural paſſages. If it did not prove mortal within the firſt three or four days, it went off without any critical diſcharge, and left the patient all over yellow, totally deprived of ſtrength, and with a pulſe ſo weak, that upon the leaſt raiſing up or ſtirring the body, it ceaſed to be felt. The negroes were not ſeized with this diſeaſe, but it was peculiarly ſevere among the white people, eſpecially ſtrangers from the northward.

6. *Febris icteriodes Canadenſis.* The yellow fever brought from Canada, by the fleet that returned after the taking of Quebec, (in 1759,) deſcribed by

by Dr. Lind. (See his 1ſt Paper on Fevers and Infection, publiſhed with the 2d edition of the Eſſay on preſerving the Health of Seamen.) In this yellow fever the blood was found to be viſcid and glutinous, the ſerum yellow and bitter, as if ſoot had been mixed with it. Saline mixtures, with the cortex and rad. ſerpentariæ, were found of great ſervice, as alſo bliſtering, which ſeemed to procure evident relief.

There are many other varieties of putrid fever, which the reader will find enumerated in Dr. Cullen's Synopſis, under the genus *Typhus*, and the original deſcribers pointed out.

In theſe countries of Britain and Ireland, the continued fevers moſt commonly met with, except in particular ſeaſons when epidemics happen to prevail, are either of the *ſimple* or *mixed* ſpecies. It would be ſuperfluous to diſtinguiſh the varieties of *ſimple* fever, of which there are ſome to be found in Sauvages; but it is of importance to point out thoſe of the *mixed* ſpecies; we may therefore remark,

1. *Febris depuratoria* of Sydenham. This fever Sydenham looked on as the ſpecies that tallied beſt with the Hippocratic doctrines of concoction and criſis, in reſpect of the regular method which Nature uſes to accompliſh the digeſtion of the morbific matter in a limited time.

Beſide the ſymptoms which are eſſential to fevers, this had theſe in particular: 1. A great faintneſs, vomiting, a dry and black tongue, great and ſudden loſs of ſtrength, a drineſs of the ſurface

face of the body, urine conſtantly either turbid or thin, a looſeneſs in the decline, unleſs the phyſician happened to ſtop it at firſt, whereby the diſeaſe was prolonged and rendered more obſtinate; its general termination was in 14 days by a ſweat or gentle moiſture, proper ſigns of concoction now, and not before, appearing in the urine. If the diſeaſe was exaſperated by improper treatment, other ſymptoms aroſe of a more alarming and dangerous tendency. When Sydenham firſt began to make his obſervations, he acknowledges, that he was not aware of any other ſpecies of fever than this. His plan of treatment was, to keep the febrile commotion within bounds, ſo as to prevent its riſing too high on the one part, or ſinking too low on the other, whereby either the excluſion of the morbific matter might be hindered, or its aſſimilation with the blood fruſtrated. And this ſcheme was agreeable to his idea, that the fever was excited in order to ſeparate ſome noxious and heterogeneous matter, or elſe to change the blood into a new ſtate.

2. *Febris ſudatoria*, deſcribed by the ſame author, as being epidemic from 1665 to 1667. This fever was attended with more ſevere and longer continued vomitings than the foregoing, and a more excruciating pain of the head; the blood was ſizy, the criſis happened earlier, and it terminated by a copious ſweat.

3. *Febris comatoſa*, epidemic in the years 1673, 1674, and 1675. It began with heat and cold alternately ſucceeding; violent pain in the head and back; ſtupor; pains like the rheumatiſm, but

but milder, in the limbs and joints; the thirſt not diſtreſſing, and the tongue moiſt; urine at firſt like that of perſons in health, as the fever advanced it became intenſely red; but the moſt diſtinguiſhing ſymptom was an unuſual propenſity to ſleep: the patients continued in a comatoſe ſtate, and could not be awakened without loud noiſes, and then would only open their eyes, and having ſwallowed what was given them, fall into a ſleep again. This fever ſometimes ran out to 28 or 30 days.

Repeated bleedings did harm, but clyſters thrown up frequently, and bliſtering with freedom, were of great ſervice. The patients were the better for being kept ſome hours out of bed every day.

4. *Febris varioloſa* of Sydenham, ſo called becauſe it had ſome ſymptoms in common with the ſmall-pox that raged in the years 1667, 1668, and 1669.

The patient was ſeized with a pain below the pit of the ſtomach, and ſuch a ſoreneſs that he could not bear to have it touched, (this ſymptom attended the ſmall-pox of theſe years;) a pain in the head, a heat in the whole body, and alſo petechiæ; little thirſt, the tongue like that of a perſon in health, rather dry, ſometimes white, but never black; profuſe ſpontaneous ſweats in the beginning, which afforded no relief, and being promoted by a heating regimen and medicines of the like nature, ſoon endangered a delirium, augmented the number of petechiæ, and rendered all the

the other ſymptoms more violent; the urine, from beginning to end, ſeemed to ſeparate and give hopes of recovery, but did not relieve the patient more than the ſweats above-mentioned.

This fever by wrong management generally proved obſtinate, neither terminating by the way of criſis, nor imperceptibly in the manner of many other fevers, but continued for ſix or eight weeks, unleſs death interpoſed; but when no conſiderable evacuation had preceded, and cooling juleps had been uſed, a pretty plentiful ſalivation ſometimes roſe toward the decline, whereby the diſeaſe was carried off beyond expectation, provided this diſcharge was not checked by evacuations, or the uſe of heating medicines. This ſalivation being the natural criſis of the fever, Sydenham directed his method of cure ſo as not to interrupt the progreſs of the diſeaſe. The patients were not ſuffered to remain in bed conſtantly, but kept up ſome hours every day, which was found of great ſervice in checking the profuſe ſweats, and hindering the increaſe of the petechiæ.

5. *Febris hyemalis*, the winter fever. This is a ſporadic catarrhal fever, which occurs frequently from the beginning of winter to the beginning of ſpring.

Pains of the head and limbs, and reſtleſſneſs, with alternate paroxyſms of heat and cold, begin the diſorder; the tongue is white, the pulſe much the ſame as in a healthy perſon, urine turbid and high-coloured, blood with the inflammatory cruſt, the whole generally accompanied with

with a cough, but no great ſtraitneſs of the cheſt, nor difficulty of reſpiration.

Bleeding and repeated cathartics carry off the fever; but if the patient be confined in bed, and tormented with heating things to raiſe ſweats; delirium, lethargy, a weak and irregular pulſe, dry tongue, and red or livid eruptions will probably enſue. For the tendency to inflammation being very great, every thing hot and ſtimulating, and conſtantly lying in bed, will infallibly create high degrees of febrile commotion, and perhaps throw the morbific matter on the brain.

6. *Febris catarrhalis epidemica*, the epidemic catarrhal fever, or influenza. There is no diſeaſe whatever, that ſeizes ſuch multitudes as this epidemic does, when it happens to prevail.

In Dr. Cullen's ſynopſis, under the genus *Catarrhus*, we have a long liſt of catarrhal fevers, with references to the books where they are deſcribed, which have appeared in different years, ſince 1387 to 1762, incluſive: and in Dr. Rutty's hiſtory of the weather, we have particular deſcriptions of thoſe which viſited Dublin in the years 1729, 1732, 1733, 1737, 1743, 1762, and 1767. From 1767, until the laſt winter, (1775) we had no epidemic of this ſort; but then, the moſt univerſal one appeared, that had ever been remembered. It began in the latter end of October, immediately after the great ſtorm of the 20th; but it only paſſed for a common feveriſh cold, until the firſt week of November, by which time this cold was found to be ſo frequent that it ſoon became evident an epidemic prevailed; and by the end of the

the month, there was ſcarce a family in town that was perfectly free: by this time, it had ſpread acroſs the kingdom, in a direction due weſt; but did not appear to have extended itſelf much either to the northward, or ſouthward until ſome weeks afterwards; inſomuch that the people at Derry, and Kilkenny, were beginning to boaſt of the wholeſomeneſs of their reſpective ſituations. It began in London much about the time that it did in Dublin, and the following maſterly deſcription was drawn up by Dr. Fothergill, and ſent to the medical people reſident in different parts, of Britain and Ireland; among others to the Author, who thinks he cannot do better than lay it before his readers, as being far ſuperior to any thing he could pretend to furniſh.

"London, 6th December, 1775.

"About the beginning of the laſt month, it was mentioned to me in many families, that moſt of the ſervants were ſick; that they had colds, coughs, and ſore throats, and various other complaints.

"In the ſpace of a week theſe complaints became more general; few ſervants eſcaped them, eſpecially the men, who were moſt abroad; many of the other ſex, likewiſe, and people of higher condition, were attacked: nor were children wholly exempted.

"The diſeaſe, which had hitherto been either left entirely to itſelf, or had been treated with the uſual domeſtic medicines appropriated to Colds, now claimed the attention of the Faculty, and, for the ſpace of near three weeks, kept them for the moſt part univerſally employed.

"Moſt

" Moſt of thoſe whom I ſaw, were ſeized (and often ſo ſuddenly as to be ſenſible of the attack) with a ſwimming or ſlight pain in the head, a ſoreneſs of the throat, and all over the body, with a ſenſe of coldneſs, particularly in the extremities. A cough ſoon followed, a running of the noſe, watery eyes, ſlight nauſea, frequent calls to make water, and ſome were ſeized with a diarrhœa.

" More or leſs of feveriſh heat, inquietude, pain about the breaſt, præcordia, and in the limbs ſoon ſucceeded, but in various degrees. Many were capable of continuing in their uſual occupations, under theſe ſymptoms; others were obliged to ſubmit to confinement; and not a few to their beds.

" The tongue was always moiſt; the ſkin ſeldom remarkably hot or dry; the pulſe often full, quick, and harder than one would have expected from ſuch a temperature of the ſkin.

" Several were ſeized with a diarrhœa: the ſtools were always black, or of a deep yellow colour; and ſo were thoſe, for the moſt part, which were procured by purgative medicines.

" In a few days every complaint abated except the cough; this continued the longeſt of all the ſymptoms, and, in the fore-part of the night, was exceedingly troubleſome and vexatious; towards morning generally came on a ſweat and eaſy expectoration.

" Thoſe who were ſeized at firſt with very copious defluxions from the noſe and the fauces; or had a plentiful and ſpontaneous diſcharge of black bilious

bilious ſtools; or made large quantities of a high-coloured urine; or ſweated profuſely, of their own accord, a night or two after the ſeizure, ſooneſt grew well.

"In many caſes it was neceſſary to take away ſome blood, the condition of the pulſe and vehemence of the cough making it neceſſary. The blood was almoſt uniformly ſizy, repreſenting a flat cake of yellowiſh tallow, floating in a deep yellow ſerum. Very few inſtances occurred where the ſize formed the cup-like appearance which occurs in moſt of the genuine inflammatory diſorders.

"By warmth, diluting, cooling liquids, mild diaphoretics, gentle and repeated purgatives, the diſeaſe for the moſt part ſoon gave way in ſubjects otherwiſe healthy. Sometimes it was neceſſary to repeat the bleeding; ſometimes bliſters became neceſſary, and were ſerviceable in abating the cough, which was the laſt of all the ſymptoms that gave way: after the neceſſary evacuations, anodynes for the moſt part had very ſalutary effects.

"In many inſtances the diſeaſe aſſumed the type of an intermittent towards its decline: the bark however did not ſucceed in curing it. The ſymptoms, as often happens in bilious diſorders, were ſometimes aggravated by this medicine. A few doſes of ſome mild cathartic moſt commonly removed it effectually.

"Many who neglected themſelves and went abroad with the diſtemper upon them, frequently got

got additional colds, and brought on a fever of the moſt dangerous kind; a few died phrenetic.

"Ancient, aſthmatic perſons, were likewiſe great ſufferers for the moſt part: a peripneumonic fever came gradually on, which often terminated fatally. And of thoſe who did recover, their amendment was ſlow, and medication difficult.

"And indeed it appeared that very few perſons wholly eſcaped the influence of this morbid conſtitution: for it ſeemed to aggravate every preſent malady.

"It proved fatal likewiſe to ſeveral very young children, diſpoſing them to violent coughs or diarrhœas.

"Perhaps, however, there is ſcarcely an inſtance to be met with, of any epidemic diſeaſe in this city, where ſo many perſons were ſeized, and in ſo ſhort a time; and with ſo little comparative mortality."

As this diſeaſe appeared preciſely in the ſame form, in Dublin, it would be ſuperfluous to attempt any further deſcription. Here the number of deaths among the lower people was very conſiderable, increaſed no doubt by an unhappy prejudice which prevailed, that bleeding was injurious.

7. *Febris verminoſa*, the worm-fever. There are no fevers of ſuch a mixed nature, or which put on ſuch a variety of appearances as thoſe that are occaſioned by worms. The anomalous ſymptoms are

are uſually thoſe of the purely nervous kind; whence the diſeaſe might, for the moſt part, be conſidered as a variety of the nervous fever.

Children from two to ten years of age, are moſtly the patients in caſes of worm-fever. The whitiſh urine, ſtinking breath, irregular ſtate of the bowels, ſometimes bound up, and ſometimes uncommonly looſe, with griping and ſlimy ſtools, grinding the teeth during ſleep, rubbing the noſe while awake, joined to a whimſical and uncertain appetite, are ſufficiently plain evidences of worms. To diſlodge theſe, or the ſlime in which they inhabit, there is nothing more effectual than repeated doſes of calomel, purged off with ſome appropriate cathartic; the fever generally ſubſides immediately on clearing the inteſtines: if it ſhould not, the antimonials in ſmall doſes are to be given, as they ſeldom fail to take off, or at leaſt moderate the diſtreſs: and in order to ſecure the recovery and prevent a relapſe, nothing anſwers better than a light tincture of hiera picra, or of rhubarb in lime-water, taken every day in ſuch quantities as ſhall keep the bowels gently open.

8. *Febris Puerperalis*; the Fever peculiar to women in child-bed. It is but within theſe few years that this fever has been ſo particularly obſerved and deſcribed, as to engage the attention of the faculty. An uncommon number of deaths among lying-in women, happening one ſeaſon in London, as well in private practice as in the hoſpitals, firſt ſtirred up ſome of the accoucheurs to make inquiries into the nature of a diſeaſe that appeared ſo very alarming; and hence aroſe the treatiſes

treatiſes which have been publiſhed by Drs. Hulme, Leake, and Denman.

It was formerly mentioned, that the diſtinguiſhing, or pathognomonic ſign, of this diſeaſe, is a ſevere and fixed pain, in the lower part of the belly, generally to one ſide, (not ceaſing and returning at intervals, or flying about like the common after-pains) invading in ſome few days after delivery, but the period uncertain, and, together with the common ſymptoms of fever, attended by a tenſion of the abdomen, and a remarkable degree of ſoreneſs in the teguments and ſubjacent muſcles. Theſe circumſtances laſt mentioned, joined to the appearances of mortification, or at leaſt ſuppuration of the omentum, inteſtines and other viſcera, obſerved on diſſecting ſome of the ſubjects who fell victims to the diſeaſe, all afforded ſufficient grounds to eſtabliſh the theory which ſuppoſes the *puerperal* to be an *inflammatory* fever: The natural conſequence of this theory was a propoſal for trying the antiphlogiſtic method of cure, by repeated bleeding, bliſtering, &c. But whatever ſucceſs might have attended this mode of treatment in England, it has not been found to anſwer with us; as the only patients who have been known to recover, in this country, have evidently been ſaved by repeated purging, aided by ſaline juleps, or ſometimes the effervescent mixtures; and every one periſhed who was managed in the merely antiphlogiſtic way.

The medicine which has been moſt commonly uſed of late, for the purpoſe of purging, is the febrifuge powder, compounded of nitre, ſcammony,

mony, calomel, and emetic tartar; and its efficacy has been proved in many inſtances, both in private, and hoſpital-practice; for now, ſince the ſigns and ſymptoms have been ſo clearly pointed out, people find the puerperal fever to be a more frequent diſeaſe than was formerly imagined.

It is obſervable that if the patients are ſuffered to paſs more than ſix or eight hours without having a ſtool, the pain and other diſtreſſing ſymptoms always increaſe, and therefore it is a rule to keep them conſtantly under the influence of the cathartic until the fomes of the diſeaſe appears to be entirely removed. It is an unfortunate prejudice that generally prevails among the women, that a purging is always to be conſidered as an alarming circumſtance during the time of lying-in, and hence they are apt to be terrified at the mention of any attempt to excite a diſcharge from the bowels: This notion muſt often have proved deſtructive, as on the contrary, nothing contributes ſo much to the ſpeedy recovery of the patient, as keeping the bowels conſtantly open, in order to carry off the various acrid and offenſive matters that are ſo apt to accumulate during the latter weeks of pregnancy, and which plainly appear to be the pre-diſpoſing cauſes of the puerperal fever, the inflammation being only a neceſſary conſequence of the irritation and over-diſtenſion of thoſe ſenſible membranes, and which, if once ſuffered to take place, is perhaps not capable of being removed by all the powers of the medical art. *

CHAP.

* The importance of the ſubject muſt ſerve as our apology for introducing theſe ſhort remarks on the puerperal fever, in this place; as it belongs properly to the ſexual diſeaſes.

CHAP. VII.

History of Intermittent Fevers or Agues, and Methods of Treatment.

INTERMITTENT Fevers are endemic in countries where the soil is damp, and in such situations these diseases break out regularly every spring and autumn; in other places, agues seldom appear but as epidemics, in particular seasons only.

Feeding chiefly on crude and watery vegetables, dejection of mind, immoderate evacuations, and every thing that impoverishes the blood, or weakens the tone of the solids, will create that morbific disposition which favours the production of intermittent fevers; and hence it is, that these are observed to be more frequent among the poor than among the rich.

It has also been remarked, that agues are more violent in the country, and in farm-houses, than in large villages or towns, where the bad effects of a noxious atmosphere appear to be in some measure corrected by the smoke from numbers of fires; and it is said, that keeping on large fires during seasons when intermittent fevers are common, tends greatly to the preservation of health.

The paroxysm of an intermittent fever, is to be distinguished into three stages; the cold fit, the hot fit, and the sweating.

The cold fit begins with yawning, ſtretching, and a certain uneaſy ſenſation in the ſmall of the back, and at the ends of the fingers; then comes on the exceſſive cold, accompanied with ſhivering, which is ſometimes ſo ſevere as to ſhake even the bed where the ſick perſon lies; nevertheleſs, at this time, it appears from the thermometer, that the real heat of the blood is rather increaſed than diminiſhed. Along with this exceſſive coldneſs, there is a difficulty of breathing, with high degrees of oppreſſion, nauſea, and frequently vomiting. In the mean while the blood forſakes the lips and cheeks, the nails are livid, and the whole ſkin is ſo ſhrivelled up and contracted, that the rings which, before the fit, were tight to the fingers, will now drop off: the pulſe is weak but quick, and if there be any urine made, it is pale and limpid.

The duration of the cold fit is uncertain, ſometimes it will continue four or five hours, in other caſes it will not laſt more than half an hour; but in general it will be found to hold between one and two hours. For the moſt part it is obſervable, that the longer the cold fit laſts, ſo much the more violent the enſuing heat; this however, is not conſtant; for when agues run out to a great length, the ſenſation of cold gradually diminiſhes.

When an ague proves mortal, (which however is ſeldom the caſe) it has been generally ſaid, that death happens in the cold fit; and it has been averred, that diſſections have ſhewn the immediate cauſe to be an accumulation of blood in and about the

the heart, oppreſſing and over-diſtending the large veſſels at the center, the ventricles and auricles, together with the venous ſinuſes, and the two large arteries being found loaded with coagulated blood. This way of accounting for the death of the patient, agrees perfectly well with the theory of intermittent fevers, which ſuppoſes the cold fit to conſiſt in a ſtoppage of the circulation in the extremities of the finer arteries, no matter whether it be owing to lentor or to ſpaſmodic conſtriction. But Dr. Lind, who has ſeen many hundreds of ague-caſes, ſays, he never ſaw a perſon die in the cold fit, though he has known ſeveral carried off in the hot one; and he is clearly of opinion, that it is the hot fit which not only endangers the patient's life, but alſo in moſt caſes of intermittent fever, by its continuance, weakens and impairs the whole habit of body.

That there is an accumulation of fluids at the center during the continuance of the cold fit is not to be doubted, but the heart in a ſhort time recovers itſelf ſufficiently to ſhake off the load; at the beginning of the hot fit, the anxiety, ſickneſs, and difficulty of breathing remain, but gradually diminiſh as the pulſe grows fuller and ſtronger. Along with the heat, which is generally greater while it laſts than it is in moſt ſpecies of continued fever, there is an exceſſive thirſt, violent head-ach, and frequently delirium, or in very bad caſes a degree of ſtupidity or coma: the breathing is quick but free; the pulſe ſtrong, full, and rapid, and the urine red or high-coloured.

The

The duration of the hot fit is uncertain, and determined by a variety of circumſtances, but it is almoſt conſtantly ſucceeded by a profuſe ſweat, which terminates the paroxyſm.

After an apyrexy or interval of eaſe, which is different in length according to the ſpecies of the ague, the ſame cold and hot fits return again and again, until the fever either ſpends itſelf and ceaſes ſpontaneouſly, (which often happens in thoſe intermittents that prevail in the beginning of ſummer) or until the phyſician interpoſes and ſtops the progreſs of the diſeaſe.

Since it is impoſſible to know at the beginning, whether a fever will turn out continual, remittent, or intermittent, we muſt always wait for ſome days before its true form can be aſcertained; and during this time, if aſſiſtance ſhould be required, we ſhall naturally proceed to take away ſome blood, if the pulſe and other circumſtances be ſuch as ſhall demand this mode of evacuation; we ſhall likewiſe, if there be manifeſt indications for an emetic, direct one; and alſo, if the bowels are not ſufficiently emptied in conſequence of taking the emetic, we ſhall order ſome proper cathartic medicine: very often theſe means will be found to carry off the complaints; but if they ſhould not remove the febrile ſymptoms, then we are to try, as hath been formerly directed, the febrifuge powder, or ſome other compoſition with a ſmall proportion of the antimonial.

This method will be proper, let the fever turn out as it will; but if it ſhall be found in the courſe of a few days to be an intermittent, and not likely to

to go off by a natural criſis, we muſt then have recourſe to the Peruvian bark.

The method of exhibiting this very capital medicine muſt be varied according to many circumſtances, which are often not to be collected but on the ſpot, and which muſt determine whether it ſhall be ſwallowed in a mixture, electuary, bolus, pills, decoction, or infuſion.

Where it can be ſo taken, the moſt efficacious way is to give it in a mixture, the powder being ſhaken up with claret, (which was Sydenham's method) or with ſome diſtilled ſimple water warmed with a little brandy or other ardent ſpirit. In this form the patient muſt take, during the interval, as much of the medicine as will ſerve to prevent the return of the fit; adults generally require from ſix to eight drachms, and the length of the apyrexy will determine the times when it ought to be taken. If the ague be a *quotidian*, wherein there is a fit once in every 24 hours, the interval will be ſo ſhort, that the patient will be obliged to take his doſe of bark every ſecond hour. If it be a *tertian*, wherein there is an apyrexy of at leaſt 24 hours, every third, or perhaps every fourth hour will be often enough for the proper quantity to be taken. But as it hath been obſerved, that the bark, is moſt certain in its effects when the full quantity is in the body at the time the return of the cold fit is expected; in thoſe agues where the apyrexy is long, the doſes ought to be given ſo as to leave the requiſite proportion of the medicine in the ſtomach at the time when it is found to be moſt effectual.

Thus,

Thus, in the *quartan* ague, where we have 48 hours free from the fits, the firſt day of the apyrexy may be allowed to paſs without taking any bark, but on the ſecond let it be given every ſecond or third hour.

Though the firſt ounce or two of the cortex ſhould be found to prevent a return of the fever, yet we are not to deſiſt immediately from its uſe; but on the contrary give a doſe every fifth or ſixth hour for two or three days, in order to ſecure againſt a relapſe; after that, the medicine may be given only twice a-day for one week; and once a day for another week; the patient all the while taking care not to expoſe himſelf to the night-air, and avoiding every ſort of food that is cold, flatulent, and watery.

Removing into a purer air and gentle exerciſe, eſpecially riding, will contribute greatly toward a complete recovery. The diet in intermittent fevers ought to be light but nouriſhing; fleſh meat is allowed; wines, and particularly thoſe of the aſtringent kind, are proper, but malt-liquor is uſually forbidden. During the cold fit, the univerſal conſtriction of the pores occaſions great thirſt, but nevertheleſs it is not proper to allow the patients to take large draughts of any kind of liquor; as the hot fit comes on, they may then drink freely of ſage-tea, two-milk whey, or very weak wine-whey.

The cortex ſeldom fails to remove a *quotidian* or *tertian* ague; but it will ſometimes miſs in the *quartan*.

quartan. In this laſt mentioned ſpecies, neither the cold nor the hot fits are ſo long, nor ſo ſevere as in tertians, the whole period ſeldom laſting more than four hours. The appetite in the quartan ague is often obſerved to be rather voracious; whereas, in the quotidian and tertian, the deſire for food is uſually much impaired during the whole courſe of the diſeaſe.

In quartan agues the morbific matter is preſumed to be of a more fixed nature, and to be more deeply rooted than in any of the other two ſpecies; therefore, in the cure of theſe we are often obliged to have recourſe to things of an aperient and deobſtruent nature, as well as to the cortex; and as the diſeaſe ſometimes runs to a great length, the patients naturally grow tired of any one form, which will oblige the phyſician to vary his method, and perhaps try other things beſide the cortex, of which there is no ſmall choice; as there is ſcarce any diſeaſe for which there is a greater variety of empirical remedies than for an ague. Dr. Lind has been at the pains of collecting many of theſe, which are inſerted below in the note,* and he mentions the great ſucceſs which he has

* In the cold fit, or juſt before its approach, are taken from a glaſs to half a pint of brandy by itſelf, or a glaſs of brandy with a grated nutmeg, with half an ounce of brimſtone, or with the ſame quantity of powdered oyſter-ſhells.—A quarter of a pint of gin with a tea ſpoonful of pepper.—A glaſs of uſquebaugh with a ſpoonful of lemon juice.—A pint of wine taken by itſelf, or a glaſs of it with the white of an egg, with

has found from the uſe of opium in intermittent fevers.

This

with a ſpoonful of the juice of houſeleek, or with the ſame quantity of the juice of plantain.—A ſpoonful of the ſpirit of turpentine.—Four ſpoonfuls of the juice of rue.—Half a pint of the juice of nettles.—Half a pint of the juice of groundſel. Half a pint of ſtrong decoction of cinquefoil.—Half a pint of a ſtrong decoction of ſpearmint in milk.—A pint of a ſtrong decoction of horſe-raddiſh in ſtale beer.—A pint of ſtrong beer in which ſome broken pieces of glaſs-bottles, or of flint-ſtones heated in the fire have been quenched and boiled.—A whole lemon.—A vomit of ſea-water.—The ſnuff of a candle with nutmeg.

In the intervals of the fit are taken bay-leaves dried and powdered, to the quantity of a drachm three times a day.—The inner bark of the aſh, from half a drachm to a drachm, with a ſcruple of ſalt of wormwood, taken four times a day.—The inner bark of the elm near the root, to the quantity of a drachm three times a day.—Half a drachm of the root of black-thorn, taken three times a day.—Half an ounce of brimſtone in a glaſs of ſtrong beer, taken three mornings ſucceſſively. Half an ounce of muſtard-ſeed in half a pint of gin, three mornings ſucceſſively.—A common ſpider gently bruiſed and wrapped up in a raiſin, taken either in the cold fit or three ſucceſſive mornings.—Five grains of cobwebs mixed with crumbs of bread twice a-day.

External applications are a hard boiled egg ſplit, and applied hot to the wriſts.—Camphire and ſaffron hung in a bag to the pit of the ſtomach.—Bruiſed ſpiders and tobacco applied to the wriſts.—Petroleum applied either to the feet or wriſts.—Yarrow to the feet.—Rue, with the buds of honey-ſuckle, bramble, and elder, to the wriſts or feet.—Mouſe-ear with vinegar and ſalt; alſo wall-pepper, ſhepherd's-purſe, and vervain, applied to the ſame parts, about an hour before the fit. Eſſay on Diſeaſes incidental to Europeans in hot Climates, page 297.

This practice is not abſolutely new, though it does not appear that Dr. Lind knew it had been tried before, neither is it known that any perſon has uſed it in ſo many caſes.

He obſerved, that if taken during the intermiſſion, this medicine had not the leaſt effect either in preventing or mitigating the ſucceeding fit; when given in the cold fit, it once or twice ſeemed to remove it, but when given half an hour after the commencement of the heat, the opiate generally gave immediate relief.

"From fifteen to twenty drops of tinctura "thebaica in a draught, with two drachms of ſyr. e "meconio, was the doſe. This draught ſhortens "and abates the force of the fit, and is found to "remove the diſeaſe with more certainty than an "ounce of bark; it generally gives ſenſible relief "to the head, and occaſions a profuſe ſweat. "This ſweat is attended with an agreeable ſoftneſs of the ſkin, inſtead of the diſagreeable "burning ſenſation which affects the patients "when ſweating in the hot fit, and it is always "much more copious than in thoſe who are not "under the influence of opium; and it often produces a ſoft and refreſhing ſleep to the patient, "who is tortured in the agonies of the fever, from "which he awakes bathed in univerſal ſweat, "and in a great meaſure free from all complaints."

In caſes where opium did not abate the ſymptoms of the fever, it never augmented their violence: even a delirium was not increaſed by the opiate,

opiate, though this will not remove it; opium ſeems alſo in this diſeaſe to be the beſt preparative for the bark, and generally renders a leſs quantity requiſite. When the patient is coſtive who is to take the bark immediately after the fit, the doſe of tinctura thebaica is to be given in a proper quantity of tinctura ſacra, which will cleanſe the inteſtines as well as ſhorten the fit. Dr. Lind ſays, that this remedy preſerves the conſtitution ſo entirely from injury, that ſince he uſed opium in agues, neither a dropſy nor jaundice has attacked the patients. He alſo bears teſtimony of the great ſafety as well as efficacy of the bark, and that it is by no means chargeable with laying the foundation of future complaints: for though he had annually preſcribed, for three years, upwards of one hundred and forty pounds weight of this drug, yet he never obſerved any bad ſymptoms which could with propriety be aſcribed to its uſe, except in two inſtances. The one was a young woman, where the bark was ſuppoſed to ſtop the menſes for three months; the other was a perſon ſubject to an aſthma, wherein it occaſioned a diſtreſſing degree of ſuffocation, until by vomiting the bark was thrown up. (Aſthmatic habits, it is to be obſerved, are thoſe wherein the cortex is moſt apt to diſagree.)

After all he concludes, that the bark, when good in its kind, and judiciouſly adminiſtered, is the beſt and ſafeſt remedy for agues, and we may add, for many other diſeaſes.

When

When the bark fails in removing intermittent fevers, it will generally be found owing to one or more of these three causes; not persevering in its use for a sufficient length of time, administering it in small doses, or giving it in an improper form; for it is to be observed, that the form is of some consequence. Dr. Lind prefers a mixture to bolus or electuary, and says he has found that six drachms of powdered bark given in a julep, warmed with some spirituous water, is as effectual as an ounce in the form of an electuary, and proves less disagreeable to the stomach. In such subjects as cannot swallow the requisite quantity, or where the stomach really will not bear it, the cortex must be given by clyster; half an ounce of the extract dissolved in four ounces of warm water, with the addition of half an ounce of sweet oil, and six or eight drops of tinctura thebaica, is the formula recommended by Dr. Lind, and this to be thrown up every fourth hour or oftener, as occasion shall require.

For children, the quantity of extract and of tinctura thebaica must be proportionally lessened. In such tender subjects, agues have been cured by making them wear a waistcoat with powdered bark quilted between the folds of it: (See Dr. Pye's paper in the 2d vol. Lond. Med. Obs. Art. XVIII.) bathing in a semicupium made of decoction of the cortex, or rubbing the spine with a mixture of equal parts of tinctura thebaica and linimentum saponaceum, have been found to remove the disorder.

When

When agues run out to an extraordinary length, as quartans in particular are ſometimes found to do, they are often ſucceeded by a jaundice or dropſy, and ſometimes end in a general waſting of the body. On the other hand, there are obſervations which ſhew, that a ſevere cough from an affected liver, an epilepſy, the hypochondriaſis, and the gout, have diſappeared after an ague; and long and obſtinate quartans have been carried off by an hæmorrhoidal flux, or have been known to give way to the ſmall-pox, or ſome other acute fever.

CHAP. VIII.

Varieties of the different Species of Intermittent Fevers.

INTERMITTENT fevers of every ſpecies are almoſt without exception to be treated according to the method already laid down; yet as accurate hiſtories are not only pleaſing, but may ſometimes be of real uſe in forming indications of cure, we ſhall here ſubjoin ſuch varieties as are moſt likely to occur in practice.

From what has been already ſaid, the reader will underſtand the circumſtances which mark the three ſpecies of ague; namely, the *quotidian*, *tertian*, and *quartan*: of each of theſe there are ſeveral varieties which require to be diſtinguiſhed; and firſt of the *quotidian*, there are,

1. *Quotidiana ſimplex.* In the ſimple quotidian ague, the cold fit comes on in the morning, and returns

returns regularly the next day at the ſame hour; the ſhivering and heat are not exceſſive, and all the other ſymptoms are rather mild; the ſpring is the uſual ſeaſon for its appearance, and it moſt commonly ſeizes young ſubjects of a delicate frame.

The ſimple quotidian is not a common diſeaſe, for though we often meet with agues wherein there is a cold and hot fit once in every twenty-four hours, yet many of theſe are what the writers term *Double Tertians*, in which the fit does not return daily at one regular hour; but this day (for example) it ſhall begin in the evening, and to-morrow it will come on in the morning, and ſo on alternately; beſides, in the double tertian, one fit, generally that which comes on in the evening, is always more ſevere than the other; whereas, in the true ſimple quotidian, the fits not only come on nearly at the ſame hour, but they are alſo of nearly the ſame degree of violence.

There are alſo double quotidians; and therefore another variety is,

2. *Quotidiana duplicata*, where there are two cold and as many hot fits in the courſe of every twenty-four hours. In theſe caſes the intermiſſions are very ſeldom complete, and are properly but remiſſions; therefore theſe are to be claſſed with remittent fevers, except when the apyrexy is really perfect.

3. *Quotidiana hyſterica*, often obſerved in women of an hyſterical conſtitution. The febrile ſymptoms

toms are very mild, and the urine limpid; the attack is in the evening with yawning and a ſlight ſhivering, ſucceeded by gentle heat, but no remarkable ſweat.

4. *Quotidiana cephalalgica.* The ague wherein a head-ach is the moſt predominant ſymptom; this variety is alſo chiefly obſerved in women and young girls, and ſometimes the fits are double.

Varieties of the *tertian* are,

1. *Tertiana legitima*, the true tertian ague.

The fit in the true quotidian begins about ſeven in the morning, but in the true tertian generally between nine and eleven; the whole period does not exceed twelve hours. The deſcription and manner of treatment need not here be repeated.

2. *Tertiana ſpuria, ſubcontinua* ſeu *extenſa*, rather belongs to the remittent fever, as the fits run out to ſuch a length that there is hardly any true apyrexy. Sydenham uſed to give the bark in larger quantities, the nearer the intermittent approached to a continued fever.

3. *Tertiana pleuritica*, accompanied with a ſevere ſtitch in the ſide: this diſeaſe prevailed at Montpelier in May 1760, and required repeated bleedings, with cathartics interpoſed. Dr. Lind alſo bled in theſe caſes, gave the cortex in very large doſes, and bliſtered on the part.

4. *Tertiana*

4. *Tertiana aſthmatica*; when the fit is accompanied with great difficulty of breathing. See Morton's 13th and 21ſt Hiſtories.

5. *Tertiana carotica*; after two or three periods, the patient, when the fit comes on, inſtead of the ſhivering and coldneſs, is ſeized with inſenſibility, and drops down apoplectic. In theſe caſes a large bliſter muſt be applied; and when the intermiſſion takes place, we are to throw in from one to two ounces of bark, leſt a return of the coma carry off the patient. This diſeaſe was ſeen in Dublin 1768, is remarked by Dr. Lind, p. 292. and mentioned by Sydenham in his Epiſtle to Dr. Brady; obſerved alſo by Morton, who gives two hiſtories.—Hiſt. 25, and 26.

6. *Tertiana cardialgica.* A lady in the firſt attack was ſeized with a violent pain in the ſtomach. Every ſubſequent fit increaſed it ſo, that at length it became intolerable. It neither yielded to bliſtering, nor the external application of tinct. thebaica, but gave way to two ounces of the cortex taken during the intermiſſion. (Lind's Eſſay on Diſeaſes incidental to Europeans in hot Climates, p. 293.—Morton has an obſervation of a like nature, Hiſt. 16.)

7. *Tertiana duplex*, as already mentioned, is often taken for a quotidian, and frequently the fits run into one another, ſo as to render it a remittent fever.

8. *Tertiana duplicata*, where there are two cold and as many hot fits every other day.

9. *Tertiana urticata*; during the fit the body ſtrikes out in blotches, attended with great itchineſs, like the ſtinging of nettles.

10. *Tertiana cholerica*; the fits are attended with violent vomiting of bilious matter, and cholic pains; a repetition of antiemetic draughts of ſalt of wormwood, and lemon-juice, are requiſite during the fit. See Morton, Hiſt. 3, 4, 5, and 7.

11. *Tertiana epileptica.* And,

12. *Tertiana hemiphlegica.* There have been ſome caſes obſerved wherein the fit has come on with general convulſions; others where the patients have loſt the power of one ſide.

13. *Tertiana rheumatica*, ſeu *arthritica*, accompanied with ſevere pains in the limbs and joints.

Of the *quartan ague* we may remark the following varieties:

1. *Quartana legitima.* The regular quartan is an autumnal ague; the fits attack in the afternoon; the cold is not ſo ſevere as in the true tertian, but of longer continuance, laſting perhaps a couple of hours, but without much ſickneſs or vomiting. The hot fit goes off without much ſenſible evacuation.

2. *Quartana ſplenetica.* When the ſpleen appears to be infarcted and enlarged, ſupplying, as it may be preſumed, a fomes which keeps up the diſorder.

3. *Quartana hepatica*; when the liver is affected in like manner. In theſe we ſhall ſometimes find advantage from antimonials in ſmall quantities,

ties, and the flores martiales, combined with the gums, ammoniacum, galbanum, and myrrh.

4. *Quartana metaſtatica.* When there is an evident tranſlation of the morbific matter, as was obſerved at Montpelier in a young man whoſe ague left him whenever his eyes inflamed, and returned again as often as theſe grew well. This metaſtaſis was ſo frequently repeated, that there was no doubt remaining of the tranſlation. Morton gives two hiſtories of a like metaſtaſis.

In all theſe, the fits are ſuppoſed to come on according to the true quartan type, leaving an apyrexy of two days. But there are agues which do not return in this regular way, and theſe have been called *Quartanæ Duplices*, *Quartanæ Duplicatæ*, *Quartanæ Triplices*, and *Quartanæ Triplicatæ*. There is no neceſſity, however, for retaining theſe names, ſince all agues that do not preſerve the regular type had better be termed *Erratics*.

The *quintanæ*, *ſextanæ*, &c. returning every fifth, ſixth, or ſeventh day, have been but rarely obſerved, but whenever they did occur they gave way to the bark, like all the other varieties of intermittent fever.

CHAP. IX.

Hiſtory of Remittent Fevers; Diviſion into Species, and Methods of Treatment.

REMITTENT Fevers are of a middle nature, between the continued and intermittent. In their

courſe they often reſemble continued fevers ſo nearly as not to be diſtinguiſhed but by attentive obſervation, but in their cure they are found to agree with intermittents, in yielding to nothing with ſo much certainty as to the cortex.

This genus of fever is endemic in all hot countries, where the ſoil is marſhy, with ſtagnant waters, which fill the atmoſphere with putrid vapours; and often proves deſtructive to armies, who are obliged to encamp in ſuch ſituations: hence it is, that the beſt treatiſes on remittent fevers are written by phyſicians who were employed in military hoſpitals.

Toward the decline of autumn is the ſeaſon when remittent fevers have been obſerved to become moſt frequent in Europe and in North America. They begin their attack pretty much like the tertian intermittents, with yawning, ſtretching, nauſea or bilious vomiting, giddineſs, oppreſſion, and a ſenſation of cold, but not ſo exceſſive nor of ſo long continuance as in the beginning of an ague-fit; then ſucceed extreme heat, thirſt, pain of the head, back, and ſtomach; reſtleſſneſs, difficulty of breathing, and generally delirium. The pulſe being now hard, though ſeldom very full; the tongue white and moiſt, with a yellowneſs very perceivable in the whites of the eyes, and ſometimes over the whole body.

Theſe ſymptoms uſually perſiſt for two or three days; ſometimes for four, five, or perhaps ſix, when at length a ſweat breaking out preſerves the patient, and renders him tolerably eaſy for a few hours,

hours, but after this remiſſion the fever kindles up again, ſometimes with a new acceſſion of the cold fit, and ſometimes without it.

This ſecond hot fit after a continuance of a certain number of hours, different in different ſubjects, ſpends its force ſo as to give way to a ſecond remiſſion, and this again is ſucceeded by a third acceſſion of the heat, and other concomitant ſymptoms.

Thus things go on until death enſues, unleſs the diſeaſe be either conquered by the powers of Nature, aſſimilating, or ſeparating, and expelling the morbific matter, or until there is a ſtop put to its further progreſs by the remedies furniſhed by art.

Thus much may ſerve for the generical deſcription; as to the ſpecies into which remittent fevers are to be diſtinguiſhed, it appears unneceſſary to make any more than two:

1. *Inflammatory remittents*, wherein the ſymptoms of exceſſive heat, thirſt, and pain, all run remarkably high, attended with a dry ſkin, and a ſtrong, full, and hard pulſe. And,

2. *Putrid remittents*, wherein the ſymptoms of nauſea, vomiting, oppreſſion, extreme weakneſs and dejection, with diſcolouring of the ſkin, and weak pulſe, ſhew plainly the putrefactive diatheſis.

Theſe diſtinctions are the more proper, as they lead us to the moſt ſucceſsful methods of treatment; whereas diſtinguiſhing the ſpecies of remittent fevers as we do the intermittents, according

ing to the days when we obſerve the remiſſion, can be of no practical uſe.

That yellowneſs in the ſkin and whites of the eyes, together with the bilious vomiting, ſo frequent in the commencement of remittent fevers, has determined ſome writers to term them Bilious Fevers, from the ſuppoſed exuberance of bile: but it appears that this change of colour is owing to a putrefactive reſolution of the blood, diſuniting the conſtituent particles, and not to the reſorption of bile, as is the caſe in a jaundice.

With reſpect to the cure of remittent fevers, we are to regulate our conduct according to the ſpecies.

In thoſe remittents, where the inflammatory ſymptoms predominate, the cure muſt begin with bleeding, cooling purges, and ſmall doſes of antimonials, in order to abate the force of the fever, and either ſtop its progreſs or bring on a remiſſion.

Theſe being premiſed, and the remiſſion being evident, the returns of the paroxyſm are to be watched, and the condition of the patient to be carefully examined, in order that we may know how to proceed. If the paroxyſm of the third revolution of the fever be neither longer, nor attended with more threatening ſymptoms than thoſe of the ſecond; if the patient preſerves his ſtrength, and bears up well, and ſigns of concoction appear in the urine, then the whole buſineſs may be truſted to Nature, and the fever will be found to terminate about the fourth or fifth revolution, for the

the moſt part by ſome natural evacuation; ſuch as a copious ſweat, turbid urine, bilious ſtools, plentiful ſpitting, or an expectoration of yellowiſh matter. But if the paroxyſm of the fifth day be ſtill longer, and more ſevere than any of the preceding; if the ſymptoms all increaſe, and the patient becomes feeble and languid; then there muſt be no longer delay, but that very evening, as ſoon as the ſweats have procured a remiſſion, a drachm or two ſcruples of the bark muſt be given, and repeated every ſecond or every third hour, ſo that five or ſix drachms may be taken before next day at noon, leſt, if this interval eſcape, there might not be a favourable opportunity afterwards of giving a ſufficient quantity of the medicine, as the fits about this period are apt to become double, and the fever to run into the continued form.

Though the cortex does not always put an immediate ſtop to the progreſs of the fever, yet it invigorates the body, prevents the more dangerous ſymptoms, and brings on the criſis much ſooner, and with leſs diſtreſs, than in caſes where things are left to themſelves. For the bark is ſo far from ſuppreſſing any natural diſcharge, as ſome have aſſerted, that the uſe of it has been evidently followed by a laudable ſeparation in the urine, with warm, profuſe, and univerſal ſweats, and plentiful bilious ſtools; though it effectually reſtrains all thoſe premature and colliquative ſweatings which are common in theſe and in the intermittent fevers.

It was in this way that Dr. Cleghorn treated the remittent fevers of Minorca during his reſidence in that iſland. For ſome years after he firſt went there, he was afraid of giving the bark in theſe fevers, the intermiſſions were ſo ſhort and ſo imperfect, having been deterred by what he had learned from the ſyſtematic authors and profeſſors, who taught that theſe fevers ought to be allowed to ſpend themſelves by a natural criſis. He very frankly confeſſes that, by this over-caution, he ſuffered many lives to be loſt; but when he got over his fears, and came to give the bark with freedom, before the ſtrength was too far exhauſted, he ſeldom loſt a man; and the more experience he had of this valuable medicine, the more he was convinced of its innocence as well as of its efficacy.

Sir John Pringle treated the remittent fevers, which occurred during his ſervice in the army, on much the ſame plan; theſe were moſtly of the inflammatory ſpecies, and required repeated bleedings, according to the urgency of the ſymptoms. Immediately after bleeding, a purge was ordered, and next morning he began to give the emetic tartar in ſmall doſes. By theſe evacuations, if the fever was not entirely removed, it certainly became eaſier, and rendered the exhibition of the cortex, when that was found neceſſary, ſafe and efficacious. For in theſe inflammatory remittents, if the bark be given without ſufficiently emptying the veſſels, and unloading the inteſtines to break the force of the fever, the diſeaſe is apt to run into the continued inflammatory ſpecies.

Dr.

Dr. Huck, who had the ſuperintendance of the military hoſpitals in the late American war, conducted himſelf on ſimilar principles, and found his practice in general crowned with ſucceſs. In North America, he never had any difficulty in conquering the fever by the cortex; but in the Weſt Indies, unleſs he gave the bark upon the very firſt remiſſion, though imperfect, the fever was liable to become continual.

In the hot countries the remittent fevers are generally of the putrid ſpecies, and ſometimes highly ſo; the only evacuations that are ſafe are made by means of ſolutions of manna, with ſoluble tartar, ſal polychreſt, and emetic tartar; for bleeding is found to do harm, and though the fever ſhould begin with ſymptoms that might authoriſe the drawing of blood, yet the greateſt caution is neceſſary with reſpect to the quantity that is taken away: as extreme nauſea and vomiting are among the moſt diſtinguiſhing ſymptoms in putrid remittent fevers, to allay the diſtreſs, and alſo, in ſome meaſure, to correct the putrefactive diatheſis, and ſweeten the colluvies in the ſtomach or flexure of the duodenum, nothing has been found to anſwer better than frequently repeated doſes of the antiemetic mixture; after this, the bark taken with freedom completes the cure. The remarkable efficacy of this medicine in the cure of putrid remittents, appears from the united teſtimony of all the gentlemen who were employed on different ſervices during the late war; and the author has had ſeveral confirmations of the ſame from practitioners reſident in the Weſt Indies; particularly Dr. Fullerton

lerton of Jamaica, and Dr. Knox of the iſland of St. Croix. If failures happen at any time, they will generally be found owing either to the unſoundneſs of the bark, or to its being adminiſtered in too ſmall doſes.

CHAP. X.

Varieties of the different Species of the Remittent Fever.

THE paroxyſms of remittent fevers are far from having one conſtant and uniform appearance; it is therefore of conſequence to diſtinguiſh the varieties.

Sauvages divides remittent fevers according to the times of the remiſſion, into *amphimerinæ*, *tritæophyæ*, and *tetartophyæ*, juſt as they happen to agree with the *quotidian*, the *tertian*, or the *quartan* type; but, as hath been already obſerved, this is not the moſt uſeful method of diſtinction; we ſhall therefore conſider them only as inflammatory, or as putrid.

Varieties of the *inflammatory remittent fever* are, the

1. *Remittens catarrhalis*; the ſymptoms are the ſame as in the continued catarrhal fever, formerly deſcribed, only with remiſſions. The cure, the ſame as there mentioned, with the addition of the cortex, if the diſeaſe ſhould not give way to ſuch remedies as are uſed in the beginning.

2. *Remittens*

2. *Remittens peripneumonica*, epidemic in the year 1757, in Provence; began with a teazing cough, pain in the ſide, and difficulty of breathing, with an expectoration of bloody mucus. In two or three days, a vomiting of viſcid bitter ſtuff ſucceeded; the remiſſions were quotidian. When it proved mortal, the remiſſions were on the 5th or 7th day. The method of cure that ſucceeded was moderate bleeding, and evacuating upwards and downwards, with decoction of caſſia and tamarinds, and a few grains of emetic tartar.

3. *Remittens ardens*, ſeu *cauſus*; the burning fever, ſo called from the exceſſive degrees of heat and dryneſs, is accompanied with the moſt violent thirſt, but neither vomiting or purging, except toward the cloſe, when a diarrhœa is apt to come on. The remiſſions are every other day according to the tertian type; the cure is to be attempted by bleeding, repeated according to the ſtrength; together with ſaline purges, and ſmall doſes of emetic tartar. The cauſus ſeizes the young and robuſt, who are much expoſed in ſummer to the heat of the ſun.

4. *Remittens bilioſa.* The chief difference between this and the foregoing is the vomiting of bilious matter, for the heat is equally exceſſive, and the thirſt as diſtreſſing; beſides, theſe bilious fevers are often attended with purging and profuſe ſweating. This is a frequent diſeaſe in camps, and breaks out in the month of Auguſt, declines as the winter's cold approaches, and is then accompanied with coughs and rheumatic pains; it requires evacuations in the beginning to break the force

force of the fever before the cortex can be given with safety.

Of *putrid remittents*, the principal and most destructive is the *yellow fever* of the hot climates, termed variously by different authors. Sauvages calls this *Tritæophya Americana*. It is extremely well described in an inaugural dissertation by Dr. James Makittrick, under the title of *Febris Maligna flava Indiæ Occidentalis*. It sets out with appearances of high inflammation; but in a very few days these give way to symptoms that show great putrefaction and dissolution of the blood. It seizes the robust and strong, who are new comers, and whose vessels are full of dense blood. Bleeding, though indicated at first, must be very cautiously practised. Saline purges with manna, to cleanse the bowels, and small doses of emetic tartar, were what the military surgeons used in the beginning, and then immediately had recourse to the cortex, in large and often repeated doses.

2. *Remittens anginosa maligna*; the *malignant sore throat*, is epidemic at times in the different countries of Europe, very fatal among children, and for the most part accompanied with a scarlet efflorescence on the skin. The cortex is the only known remedy for this disease; gentle cathartics, and small doses of emetic tartar, being first premised. See the malignant scarlet fever, in Chap. XV.

3. *Remittens paludosa*; the marsh fever, so well described by Sir John Pringle, frequent after a hot summer in low swampy soils, abounding with putrid vapours. These fevers do not bear much bleeding,

bleeding, but the cure depends chiefly on the cortex, if the ſmall doſes of antimonial ſhould not firſt remove the diſeaſe.

CHAP. XI.

Different Species of eruptive Fevers diſtinguiſhed.

WE may, with great propriety, ſay of *eruptive fevers*, that they are efforts of Nature to throw off morbific matter, and thereby reſtore health, ſince we refer to this genus all ſuch as are attended with an evident ſeparation and expulſion of ſomewhat, which, while it continues mixed with the fluids in circulation, creates a number of diſtreſſing ſymptoms, but when thrown off on the ſurface of the body, theſe are found in general either to abate of their violence, or altogether ceaſe.

There are ſeveral ſpecies of eruptive fevers, diſtinguiſhed by the different natures and appearances of the eruption; and many varieties of theſe ſpecies, according to the ſymptoms which either precede or accompany the ſeparation and expulſion of the morbific matter.

1. *Variola*; the *ſmall-pox*; wherein, after a prelude of febrile ſymptoms, a number of inflammatory puſtules ſtrike out, run to a ſuppuration, and often appear in ſuch abundance as to cover entirely the face, and almoſt the whole ſurface of the body.

2. *Vari-*

2. *Varicella*; the *chicken-pox*; the febrile ſymptoms, previous to the eruption, are much milder than in the ſmall-pox, oftentimes ſo mild as to paſs without obſervation; the puſtules, though ſo like the ſmall-pox as ſcarcely to be diſtinguiſhed, are ſeldom very numerous, are filled with a ſerous fluid, and dry off entirely before the eighth day, whereas the ſmall-pox, at ſooneſt, never become completely dry until after the eleventh.

3. *Rubeola*, ſeu *morbilli*; the *meaſles*; wherein, after a high fever for three or four days, accompanied with a cough, and running at the eyes and noſe, the face, and ſurface of the body in general, are covered with a red eruption, partly conſiſting of ſmall pimples, that do not ſuppurate like the ſmall-pox, and partly of broad flakes, which at laſt diſappear and dry off in furfuraceous ſcales.

4. *Febris ſcarlatina*; the *ſcarlet fever*; wherein the eruptions reſemble the meaſles, where theſe run only into broad flakes, but free from the cough, and other catarrhal ſymptoms.

5. *Eryſipelatoſa*; the *eryſipelatoſe fever*; wherein there is a ſuperficial inflammation, often followed by angry pimples or ſmall bliſters and cutaneous ulcerations, ſeizing particular parts of the body, moſt commonly the face.

6. *Miliaria*; the *miliary fever*; wherein the cuticle is raiſed up into innumerable and cloſely ſet minute veſicles, not in general larger than millet-ſeeds; ſometimes white, as being filled only with pellucid lymph; at other times red, containing a coloured ſerum.

7. *Aphtho-*

7. *Aphthoſa*; the *aphthoſe fever*; frequently ſupervening the miliary, though ſometimes met with in its ſimple form, wherein the inſide of the mouth is beſet with whitiſh ſloughs, and often ulcerations in the fauces, which are found preying on the uvula and tonſils.

8. *Veſicatoria*, ſeu *pemphigus*; the *veſicatory fever*; wherein, along with the ſymptoms of a very malignant putrid fever, numbers of bliſters, of the ſize of a hazel nut, or larger, filled with very acrid ſerum, are found to ſtrike out in different parts of the body.

9. *Peſtis*; the *plague*; a peculiar ſpecies of eruptive fever, wherein the ſick are ſometimes relieved from a moſt violent and deſtructive combination of ſymptoms, by the expulſion and ſettling of the morbific matter on the lymphatic glands in different parts, chiefly the inguinal, axillary, and parotid.

We ſhall firſt give the hiſtories of each of theſe nine ſpecies, lay down the moſt approved methods of treatment, and then ſubjoin the different varieties that are moſt worthy of notice.

CHAP. XII.

Of the Small-Pox. Hiſtory of the Diſeaſe, and Method of Treatment.—Chicken-pox.

THE *ſmall-pox*, like moſt other fevers, begins with a ſhivering and ſenſation of exceſſive cold, great oppreſſion, and nauſea, or vomiting; ſoon

ſoon after ſucceed exceſſive heat, thirſt, pain of the head and back, with ſtraitneſs about the præcordia, great tendency to ſleep, or ſometimes a degree of delirium, and, in tender ſubjects, convulſions. The pulſe, at this time, if the patients be of the more robuſt and plethoric habit, is frequent, full, and hard; the eyes red and ſparkling; the ſkin moiſt and ſoft.

Things continue much in this ſtate for two, three, or four days, perhaps longer, if ſome very ſevere pain attends, but for the moſt part on the third day, ſmall red ſpecks, like flea bites, appear, firſt on the face, next to that on the hands and fore-part of the arms, then on the neck and upper-part of the breaſt. Theſe, when preſſed with the finger, may be felt hard in the ſkin, and by this means may be diſtinguiſhed from other eruptions, particularly the meaſles, which, at the very firſt appearance, can ſeldom be felt in this manner, as not raiſing up the cuticle.

If the diſeaſe is of the milder and more benign ſort, the diſtreſſing ſymptoms of pain, ſickneſs, and oppreſſion, begin to abate from the firſt appearance of the eruption, and in a day or two altogether ceaſe; but in the mean while the ſkin continues hot and moiſt, and the number of eruptions increaſes hourly in the places where they firſt appeared, and new ones ſtrike out on the back, ſides, belly, thighs, legs and feet, and are ſometimes puſhed out at the very ſoles of the feet.

It is from the degrees of this abatement and ceſſation of the diſtreſſing febrile ſymptoms that we

we are to form our judgment of the future event of the diſeaſe, rather than from the quantity of the eruption; for if the oppreſſion, pain, reſtleſſneſs, thirſt and ſickneſs ſhould abate but little, or not at all, on the ſtriking out of the ſmall-pox, we may juſtly pronounce the caſe to be extremely dangerous, ſince this plainly proves that the morbific matter is not capable of being properly extricated and thrown off, and conſequently that it muſt remain blended with the fluids, and thus keep up the irritation and ſpaſmodic conſtriction. Whereas, if the fever ſhould nearly, or totally, ſubſide, after the completion of the eruption, we may expect a favourable termination, even though the number of puſtules ſhould be very conſiderable.

From about the ſixth day after the firſt ſeizure, the puſtules begin to ſwell, grow hot and become painful; and round their baſis the colour of the ſkin appears of a florid red; the whole face and particularly the eye-lids, are ſoon after ſo puffed up, that the eyes are often cloſed, and the whole countenance ſo changed and inflated as to leave ſcarce any reſemblance of the natural features.

While things are in this ſtate of inflammation, the febrile ſymptoms of exceſſive heat, thirſt, and reſtleſſneſs, again kindle up, and continue to increaſe, until the ninth, tenth, or eleventh day, according as the diſeaſe and quantity of the eruption are more or leſs ſevere.

Now, the puſtules having many of them acquired the ſize of peas, being arrived at complete

maturation, and filled with yellowiſh pus, begin to turn of a dark colour, and to dry; firſt on the face, next on the neck, breaſt and trunk of the body, and, laſt of all, on the hands and feet.

The ſwelling of the face abates in proportion to the drying up of the puſtules; but as the face ſubſides, the feet and hands puff up, and do not entirely fall until the fourteenth day, by which time the diſeaſe will have completely finiſhed its courſe.

This is the natural progreſs of the regular and milder degrees of the ſmall-pox; but in caſes where the ſurface of the body is in a manner entirely covered over with the eruption, when this comes to harden into a continued cruſt, what with the abſorption of the purulent matter, what with the offenſive colluvies from the inteſtinal canal, and what with the ſtoppage of the cutaneous diſcharges, the blood again appears to become infected with a morbific acrimony, which raiſes a new fever, that frequently deſtroys the patient in ſpite of every thing that can be attempted to obviate the danger.

Thus we ſee that there are four periods or ſtages in the ſmall-pox, which regularly ſucceed each other; (1.) the period of the primary or eruptive fever, which generally runs from three to five days; (2.) the period of remiſſion, when the moſt diſtreſſing ſymptoms abate and things continue quiet, in conſequence of the ſeparation and expulſion of the morbific matter; this uſually laſts three days; (3.) the period of the ſuppuratory fever,

fever, while the puſtules are ripening, which, in the milder degrees of ſmall-pox, does not run beyond the tenth or eleventh day; and, (4.) the ſecondary fever, that follows often upon the drying up of the puſtules, and when it does not prove fatal, ſoon comes to a remiſſion.

So far with reſpect to deſcription: as to the method of treatment, there can be no invariable method laid down, ſince there are no caſes wherein the different effects of the ſame morbific cauſes acting on different conſtitutions, are more evident than in the ſmall-pox.

As eruptive fevers in general, and the ſmall-pox in particular, attack like thoſe which are not attended with any eruption, it is plain there can be no abſolute criterion or ſign to enable us to ſay at the beginning of the diſeaſe, whether it will turn out to be the ſmall-pox, or ſome other kind of fever. It is true, indeed, that there is a remarkable oppreſſion and ſtraitneſs about the præcordia, but until the eruption actually appears, we can only gueſs from the frequency and nearneſs of the ſmall-pox, that the patient may probably have caught the infection. And therefore, the treatment of the diſeaſe in its firſt ſtage muſt always depend on the nature and violence of the febrile ſymptoms, which vary according to the conſtitution of the patient, and frequently have a mixture of thoſe ſymptoms which are peculiar to ſome ſpecies of fever, that happens then to be epidemic. Hence it is neceſſary to have regard to the preceding and preſent ſtate of the weather: a long

continuance of cold and dry weather tends to make the fibres rigid and ſtrong, and render the blood denſe and viſcid; in ſuch ſeaſons therefore the patients will require bleeding, and bear it better than in a warm, relaxing, and moiſt ſtate of the atmoſphere, and will want more of the diluting, emollient, antiphlogiſtic drink, diet and medicines; whereas in the latter ſtate, ſomething cordial, ſubaſtringent, and antiſeptic will be requiſite.

There are now and then caſes where the diſeaſe is ſo very mild, and the degree of fever ſo little alarming from the firſt attack, that medical aſſiſtance is neither neceſſary nor demanded, except perhaps at the cloſe, when it will be proper to give a gentle purge or two to carry off any remains of acrid and offenſive matter that might have been collected in the inteſtinal canal during the courſe of the diſeaſe.

But, on the other hand, it often happens, that the ſmall-pox turns out to be a moſt dangerous diſeaſe, and accompanied with ſuch a variety of ſymptoms as to demand the utmoſt ſkill and diſcernment. For, in the firſt place, if the variolous infection attacks a perſon of ſtrong veſſels, filled with rich and denſe blood, the fever is apt to run high ſo as to affect the brain, the throat, or the lungs, and produce delirium, ſuffocation, or great difficulty of breathing. In theſe caſes, where the pulſe is rapid, full, and hard, the breathing hot, ſhort, and laborious, the heat exceſſive, the thirſt great, the urine high-coloured, and the pain in the head, back, or loins exceedingly acute, we muſt bleed largely, and repeatedly if the ſymptoms do not

not abate on the firſt evacuation; and at the ſame time order antimonials in ſmall doſes, with nitre, and clyſters to empty the bowels: for the bleeding in ſuch circumſtances does not hinder the proper eruption, but on the contrary, by reſtoring moderation and freedom in ſome degree to the vital motions, gives time and opportunity for that natural ſeparation and expulſion of the morbific matter, which is the only thing that can bring permanent relief. Where the head appears to be much affected, it will be beſt to take blood from the feet, as this makes the moſt ſenſible derivation from the ſuperior parts of the body; and with a like view, bathing the legs in warm water, and wrapping the feet up in warm poultices, have been found of ſervice in abating the delirium, and relieving the cheſt.

But if the diſeaſe ſhould ſeize people of an oppoſite temperament, who have been exhauſted by preceding diſorders, or who have weak and relaxed fibres, with a poor and thin ſtate of the fluids, and ſhould ſteal on in the ſlow and gradual way, like a nervous fever; if the countenance ſhould be found pale, and the pulſe weak and fluttering, the urine crude and thin, no great thirſt or heat, continued giddineſs, and heavineſs of the head, with tremblings and a perpetual nauſea, attended with great weakneſs and dejection of ſpirit; in ſuch circumſtances we muſt endeavour to rouze the languid animal motions, by giving warm wine, or ſtrong ſack-whey, with ſome drops of the volatile aromatic ſpirit in each doſe; and on no account attempt to leſſen the quantity of blood, nor give any thing that may

may bring on a number of looſe ſtools; a gentle emetic indeed in this ſituation will be proper, as its action may not only promote the eruption, but alſo, by unloading the ſtomach, may remove the heavy ſickneſs, and relieve the anxiety or oppreſſion.

There are other caſes alſo where bleeding is equally improper as in that juſt now deſcribed, and theſe are, when we know the fluids to be in a putreſcent ſtate, or that there is a putrid fever united with the variolous matter.

In all caſes of ſmall-pox, where the eruption is ſo ſpread over the ſurface of the whole body as to check the cutaneous diſcharges; when the diſeaſe advances to its height, the humours which ought to be thrown off by the ſkin are obliged to take another route, and are carried off by large diſcharges of urine, or a number of watery ſtools; or run from the ſalivary glands, in a profuſe flow of ſaliva, while at the ſame time a great deal of watery fluid is lodged in the cellular interſtices of the hands and feet, which are now puffed up and ſwelled as in a dropſy; but in order to relieve all theſe parts, it is of great importance that the urinary diſcharge be promoted during this period; for which reaſon from the time that the eruption is completed, until the turn of the diſeaſe, we ſhould frequently give ſmall doſes of ſweet ſpirit of nitre, which will tend to increaſe the quantity of urine, and of courſe relieve all the parts that are liable to be oppreſſed by the load of watery humours retained in the body. If at any time we find theſe diſcharges ſtop, while the ſwelling of the hands and feet does not increaſe ſufficiently to ſhew that

they

they have received the additional load, we may look on things as in a very desperate state, the only hope now left, being to discharge this watery humour by means of blistering, for which purpose the epithema vesicatorium answers better than the emplastrum, and these applications should be laid to the wrists and ankles, to solicit, if possible, the flow of humours to the extremities, and divert the load from the vital organs.

While the pustules are advancing to a state of suppuration, they grow every day more painful, sleep is banished, and all the febrile symptoms are exasperated; hence there is a necessity for giving opiates every evening during this period, and these must be adapted to the various circumstances of age, sex, and constitution. Great costiveness during this stage is also common, but ought not to be allowed to continue; and therefore the bowels must be kept open by laxatives, given in the drink, or when practicable, a common emollient clyster should be thrown up at least once a day, until the height of the disease, when the pustules begin to dry, and form a crust on the face.

When this crust shall actually be formed, we are to give a dose of some of the smarter cathartics, sufficient to procure three or four stools, since this may be a means of preventing the secondary fever. As long as it can be done, the patient should be kept out of bed, and the linen should be shifted daily, since the absorption from foul clothes might be sufficient of itself to bring on a new train of febrile symptoms. But if, nevertheless, the secondary

condary fever ſhould come on, and run high, with violent head-ach, great oppreſſion, and difficulty of breathing, then we muſt immediately direct ſome ounces of blood to be drawn, in order, if poſſible, to procure a remiſſion; and the moment this is accompliſhed, we are to treat the diſeaſe like a remittent fever, giving the cortex with as much freedom as the nature of the patient's age, and the particular circumſtances of the caſe ſhall require.

During the courſe of the regular ſmall-pox, from the time of the eruption until the puſtules begin to dry, many medicines are ſeldom abſolutely neceſſary: the drinks ſhould always be cooling and refreſhing, of the ſubacid nature; and any food that is given ſhould be of the lighteſt ſort; the apartments of the ſick kept cool, and well ventilated; and when the diſeaſe ſhall be entirely over, the patients are to be repeatedly purged, in order to carry off any dregs of the variolous matter.

VARICELLA: The terms *chicken-pock*, and *ſwine-pock*, are commonly uſed as ſynonymous, to expreſs this mildeſt of all the ſpecies of eruptive fever. It has ſo ſeldom been found attended with ſymptoms of diſtreſs, or productive of any ill conſequences, that obſervators have either paſſed it over entirely, or conſidered it as a variety of the moſt benign ſort of ſmall-pox, until Dr. Heberden, with great propriety, judging it of importance to diſtinguiſh the two diſeaſes, has beſtowed a paper on the chicken-pox, in the firſt vol. of the Medical Tranſactions; wherein, with his uſual accuracy, he has laid down ſuch marks, that it will be impoſſible hereafter

hereafter for any one to miſtake the *varicella* for the *variola*. To this paper we refer; and ſhall only mention, that the principal ſigns, by which the chicken-pox may be diſtinguiſhed from the ſmall-pox, are, 1. The appearance on the ſecond or third day from the eruption of a veſicle full of ſerum on the top of the pock. 2. The cruſt which covers the pocks on the fifth day; at which time thoſe of the ſmall-pox are not at the height of their ſuppuration.

This very laſt ſummer (1776) the chicken-pox were remarkably frequent in Dublin, and were attended with higher degrees of fever than uſual; as well previous to the eruption, as during the ſuppuration of the puſtules, inſomuch that ſcarce any circumſtance was left to diſtinguiſh them from thoſe of the ſmall-pox, ſave their drying off before the eighth day, and that the diſeaſe happened to ſubjects who had previouſly ſuffered much from the ſmall-pox.

During the courſe of the diſeaſe, no medicine is required, afterwards indeed purging will be requiſite.

CHAP. XIII.

Varieties of the Small-Pox.

FROM what has been ſaid of the diſeaſe in general, it appears how neceſſary it is to obſerve the varieties of the ſmall-pox.

The

The moſt uſeful method of diſtinguiſhing is, to conſider the diſeaſe either as *ſimple*, or as *complicated* with ſome other ſpecies of fever.

The varieties of the *ſimple ſmall-pox* are,

1. *Variolæ ſimplices diſcretæ*; the regular diſtinct ſmall-pox. Though the febrile ſymptoms before the eruption often run high, and though, perhaps, even convulſions may have preceded, (which are never reckoned to portend danger at this period of the diſeaſe;) yet, immediately after the ſtriking out of the ſmall-pox, the diſtreſſing ſymptoms either abate greatly, or altogether ceaſe; the puſtules advance regularly through the inflammatory period, ſuppurate kindly, are large and prominent, full of yellow pus, and perhaps, excepting a few places on the face where the eruption is always moſt plentiful, the puſtules do not run together, but ſtand ſingle, like ſo many little abſceſſes; when they dry off they leave no pits, and there is no ſecondary fever. In theſe caſes there is no medicine required, unleſs it be an opiate to procure reſt during the painful period of the diſeaſe, while the ſuppuration is going on.

2. *Variolæ ſimplices confluentes.* The regular confluent ſmall-pox only differ from the preceding in reſpect to the quantity of eruption, which, when plentiful, the puſtules muſt of neceſſity run together: in theſe caſes, the degrees of pain and reſtleſſneſs during the advancement to ſuppuration, muſt be in proportion to the number of little angry boils, and therefore will require the free uſe of opiates during the whole of this period, which will run

run at leaſt to the eleventh day, before the puſtules be all of them completely ripened.

3. *Variolæ ſimplices chryſtallinæ*; the watery ſmall-pox, wherein the puſtules are filled with a ſerous fluid inſtead of pus.

In the true ſmall-pox, whenever the puſtules let them be diſtinct or confluent, are obſerved to be filled with an acrid ſerum, inſtead of a mild yellow pus, we are always to look on it as a bad ſign, and may be aſſured that the juices are not in a ſound ſtate; theſe chryſtalline ſmall-pox are therefore always to be ſuſpected, and we muſt be greatly on our guard with reſpect to the prognoſtic that is to be made while the diſeaſe is in being, even though there ſhould be no very alarming ſymptoms preſent.

We are alſo to ſuſpect the warty ſmall-pox, or,

4. *Variolæ verrucoſæ*; wherein the puſtules do not fill with fluid, but remain hard and dry like warts.

The inoculated ſmall-pox is to be referred to one or other of the foregoing varieties, and what medical aid may be neceſſary during the progreſs of the diſeaſe is to be regulated according to what is here laid down.

The *complicated ſmall-pox* are thoſe caſes wherein there is a manifeſt addition of ſymptoms peculiar to the inflammatory, nervous, or putrid fevers, or perhaps to the dyſentery, when the ſeaſon and conſtitution particularly favour the production of theſe diſeaſes.

Of

Of theſe the following varieties have been obſerved by different writers:

1. *Variolæ complicatæ inflammatoriæ*; the complicated inflammatory ſmall-pox. In the firſt ſtage the heat is exceſſive, the ſkin dry, tendons rigid, eyes red, prominent, and ſparkling; there is a remarkable pulſation of the carotids, with great pain in the head and ſmall of the back, and total loſs of ſtrength; after the eruption, (if the patients ſhould hold out ſo long) though there may be ſome abatement of the violent pains, yet the fever keeps up, with exacerbations every other day, and acceſſory ſymptoms of delirium, anxiety, and inceſſant toſſing. Very often the noſe will bleed, and petechiæ be ſeen forced out in the ſpaces between the puſtules, and ſometimes an eryſipelatoſe inflammation will occupy the head and face, creating a monſtrous inflammation and ſwelling; as things draw to a period, the puſtules turn black and mortify, the patient becomes comatoſe, lies ſtupid and ſenſeleſs, and at length convulſions coming on, life ſinks under the immenſe load of diſeaſe.

The methods of relief in theſe caſes muſt be formed on the plan of treatment laid down for the inflammatory fever.

2. *Variolæ complicatæ chryſtallinæ*; the complicated watery ſmall-pox. In theſe caſes, which are the oppoſites to thoſe above deſcribed, there is ſuch a poorneſs of the juices, and ſuch a want of firmneſs in the veſſels, that the eruption never ſtrikes out completely, nor do the puſtules matu-

rate

rate kindly, but remain flat and depreſſed, with a little blackiſh ſpot in the middle. When the eruption is large and confluent, the face never ſwells, but will appear as if covered with a coat of tallow. The weakneſs and dejection in theſe caſes are evident from the beginning; the fever is obſcure, though the ſickneſs and oppreſſion be very great. Purging often ſupervenes, and carries off the patient; or, if that does not happen, convulſions cloſe the ſcene.

Bliſtering with freedom, and the liberal uſe of wine, appear to be the things that are chiefly to be depended on; the diſeaſe requiring a treatment ſimilar to what is proper for the nervous fever.

3. *Variolæ complicatæ nigræ*, ſeu *ſanguineæ*; the complicated putrid ſmall-pox. When the ſmall-pox ſupervenes in conſtitutions wherein the craſis of the blood is deſtroyed by a putrefactive acrimony, the diſſolved cruor not only mixes with the ſerum which fills the puſtules, but alſo raiſes large bliſters, perhaps runs off in the urine, or ſettles on the ſkin in the form of vibices or petechiæ. In theſe deplorable caſes, unleſs by the cortex, and other powerful antiſeptics formerly mentioned when treating of the putrid fever, (the ſigns of which need not here be repeated) the putrefactive diatheſis can be corrected in the beginning of the diſeaſe, there can be little or no hope of a recovery.

4. *Variolæ complicatæ dyſentericæ*, the malignant ſmall-pox, combined with the dyſentery, or exceſſive purging.

Violent

Violent purging is a frequent ſymptom in the ſmall-pox, where there is a putrefactive acrimony, and perhaps then is not to be remedied: it is alſo to be met with in caſes where things are not quite ſo bad, and relief may be then attempted, by giving the decoctum album for common drink with port wine, if there be great ſinking of the pulſe, ordering mixtures at the ſame time with the pulvis e bolo compoſitus, either with or without the opium, as the particular exigencies may require.

But as a purging is ſometimes critical, (which may be known from the pulſe's riſing, and from the patient's own feelings of relief from the ſickneſs and oppreſſion) there muſt be great caution uſed with reſpect to aſtringents.

If other varieties more than what are here mentioned ſhould occur in practice, and ſhould not be ſo diſtinctly marked as to enable us to refer them to either of the three ſpecies of inflammatory, nervous, or putrid fever; all that can be done is, to take the indications of cure, as we do in caſes of mixed fevers, from thoſe ſymptoms which are moſt preſſing, and appear to demand moſt, the antiphlogiſtic, the cordial, or the antiſeptic courſe.

There are certain complaints which are apt to enſue in conſequence of the more ſevere and complicated varieties of the ſmall-pox, and which require to be particularly mentioned.

The ſecondary fever, though uſually aſcribed to the reſorption of pus, or to the accumulation of offenſive

offenſive matters in the alimentary canal, ought, perhaps, to be attributed rather to the incomplete ſeparation and expulſion of variolous matter. From an imperfect ſeparation alſo proceed nauſea and want of appetite, hectic heats, inflammation of the eyes; œdematous ſwellings of the hands and feet; abſceſſes and untoward ulcers, eſpecially in ſcrophulous habits; a fooliſhneſs, or degree of delirium without fever; cough, and other phthiſical ſymptoms. The ſureſt remedy for every one of theſe complaints is the cortex, which, by its power not only as a ſtrengthener of the ſolids, but as an antiſeptic and corrector of acrimony, is found to be the grand reſtorative, joined to a proper courſe of diet, change of air, and the prudent interpoſition of cathartics. Morton obſerves, that nothing ſo effectually prevents the eroſion from the acrid matter of the puſtules, whence thoſe unſeemly marks that ſo often deform the viſage, as a plentiful uſe of the cortex; and therefore, in all caſes where it appears that there is any conſiderable ſharpneſs in the variolous pus, he adviſes that we ſhould begin immediately after the drying of the puſtules to uſe this ſovereign remedy. In young children, who cannot be got to ſwallow the requiſite doſes, it may be thrown up in clyſters, or they may be bathed in the decoction.

CHAP.

CHAP. XIV.

History of the Measles, and Method of Treatment.—Varieties.

THE *measles*, next to the small-pox, is the species of eruptive fever most commonly met with, and is sometimes found in conjunction with it, as was observed particularly in the Foundling Hospital of Dublin in 1769. A number of the children having been inoculated for the small-pox, in the mean while were seized with the measles, and both species of eruption were perfectly distinct: they, nevertheless, all recovered.

This disease appears to have been bred originally in the same regions where the small-pox took its rise, as the first descriptions of the measles are found in the writings of the Arabian physicians, who also gave the first accounts of the small-pox.

In some instances, the measles come on by degrees, with a frequent and dry cough, and no other distressing complaint; but most commonly the disease begins with a general uneasiness, successive shiverings, heats, severe head-ach in grown persons, but in children a heaviness, and soreness of the throat; and, what particularly characterises this distemper, an inflammation and considerable heat in the eyes, attended with a defluxion of sharp tears, and great acuteness of sensation, so that they cannot bear the light without pain; and this flow of tears passing into the nose, produces sneezing,

ſneezing, and a dripping of the ſame acrid rheum from the noſtrils.

The heat and other febrile ſymptoms increaſe with rapidity; to which are added, a frequent and dry cough, ſtuffing, great oppreſſion, and oftentimes retching to vomit, with violent pains in the loins, and ſometimes a looſeneſs, under which circumſtance the vomiting is leſs afflicting; at other times, there is profuſe ſweating, the tongue foul and white, the thirſt very great, and in general the fever runs much higher than in the milder ſort of regular ſmall-pox.

At length, about the fourth or fifth day, and ſometimes about the end of the third, a ſudden eruption appears, and in great quantity, eſpecially about the face, which in a few hours is covered with ſpots, each of which reſembles a flea bite; many of them ſoon joining, form red ſtreaks or ſuffuſions, larger or ſmaller, which inflame the ſkin, and produce a very ſenſible ſwelling of the face, whence the eyes are ſometimes cloſed as in the ſmall-pox. Each ſmall ſpot is raiſed a little above the ſurface, eſpecially in the face, where they are manifeſt to the touch. On the limbs and trunk of the body this elevation or riſing is ſcarcely perceivable by any other circumſtance than the roughneſs of the ſkin.

The eruption having firſt appeared on the face, is afterwards extended to the breaſt, back, arms, thighs, and legs; it generally ſpreads very plentifully over the breaſt and back, and ſometimes red ſuffuſions are found on the breaſt before any eruption has appeared on the face.

Whenever this diſtemper appears in its mildeſt character, almoſt every ſymptom abates after the eruption, as happens in the regular ſmall-pox. Though in general the change for the better is not ſo thoroughly perceivable; for though the violent heat, pain in the loins, and vomiting, abate, yet the cough and head-ach continue, with a conſiderable degree of fever.

On the third or fourth day from the firſt appearance of the eruption, the redneſs diminiſhes, the ſmall puſtules dry up and fall away in little ſcales, while the cuticle peeling off is replaced by a new one. On the ninth day, when the progreſs of the diſeaſe has been ſpeedy, and on the eleventh, when it has been ſlow, no traces of redneſs are to be found, and the ſkin aſſumes its uſual appearance. Nevertheleſs, the patient is not to be conſidered as perfectly ſafe; for, except there have been, either during the courſe of the diſeaſe or immediately after it, ſome very conſiderable evacuations, either by ſweat, urine, purging or vomiting, the ſick perſon will not recover ſtrength, but the cough will continue, the fever return with new violence, and bring on great diſtreſs and danger.

The proper method of conducting the meaſles is much the ſame with that of the ſmall-pox. If the fever be high, the pulſe hard, the load and oppreſſion heavy, and all the ſymptoms violent, the patient muſt be bled once, or perhaps twice; ſmall doſes of the febrifuge powder are to be given at proper intervals, the patient is to drink plentifully of light ptiſan, or thin gruel, acidulated; and

and if the belly ſhould continue bound, a clyſter muſt be thrown up at leaſt once a day: the legs ſhould be bathed, if the head and cheſt be much affected, and the blood in theſe caſes ought to be taken from the feet, preferably to the arm. Steams of warm water received into the lungs are ſerviceable in relieving the cough and ſoreneſs of the throat. During the progreſs of the diſeaſe there is little or nothing to be done in the way of medicine, except ſome ſoftening linctus or oily mixture to eaſe the cough; all that is neceſſary is, to watch and attend to the ways that Nature ſeems to point out for a criſis, whether by looſeneſs or by ſweat; and as ſoon as the efflorescence ſhall grow pale, and the eruption begin to die away, we are to give a mild purge, which muſt be repeated at the interval of three or four days, and then the patient may be allowed more liberty in reſpect to diet.

But if, at the turn of the diſeaſe, the fever ſhould aſſume new vigour, and great danger of ſuffocation appear, we muſt bleed according to the ſtrength, and apply bliſters, with a view of preventing the load from being thrown on the lungs, where, if an inflammation ſhould fix itſelf, the patient will have very little chance of eſcaping; for, if even the preſent danger ſhould be got over, yet, if an abſceſs ſhould follow, a hectic fever will ariſe, and in the courſe of a few months deſtroy life.

The varieties of the meaſles are to be diſtinguiſhed as we do thoſe of the ſmall-pox, accord-

ing as the diſeaſe ſhall happen to be regular and *ſimple*, or anomalous and *complicated* with ſome other ſpecies of fever.

1. *Morbilli regulares*; the ſimple regular meaſles, ſo well deſcribed by Sydenham as prevailing in the year 1670; from whom we have chiefly compiled the foregoing hiſtory of the diſeaſe.

2. *Morbilli anomali*; the irregular and complicated meaſles. The anomalous meaſles that prevailed in 1674, as deſcribed by Sydenham, were complicated with many ſymptoms of the true inflammatory fever. But ſometimes the meaſles ſupervene a nervous fever, and ſometimes are combined with one that is putrid, * and then muſt be treated accordingly.

3. *Morbilli varioloſi*; the meaſles reſembling ſmall-pox. In theſe caſes the eruption is prominent, the face ſwells greatly, and many puſtules actually ſuppurate like thoſe in the ſmall-pox. This is ſaid to be a diſeaſe frequent in Paris. The cough and other catarrhal ſymptoms are the things which diſtinguiſh this from the ſmall-pox.

CHAP. XV.

Hiſtory of the Scarlet Fever, and Method of Treatment.—Varieties.

THE *ſcarlet fever* begins with a chilneſs and ſhivering, ſucceeded by heat and thirſt, but without great ſickneſs, or that inceſſant cough which attends

* See Dr. Watſon's paper. Art. XI. in the 4th vol. Med. Obſervations.

attends the meaſles; afterwards the whole ſkin is covered with ſmall red ſpots, which are more numerous, larger, and redder, but not ſo uniform as thoſe which conſtitute the eruption in the diſeaſe juſt now mentioned; theſe continue two or three days, and after they diſappear, and the cuticle peels away, a kind of branny ſcales remain, which ſometimes fall off and return, twice or thrice ſucceſſively.

While things are in this moderate ſtate, there is little or nothing required from art; for, as it would be improper to lower the fever by bleeding, or other evacuations, ſo, on the other hand, there is no occaſion to raiſe it by ſtimulating medicines, the whole is therefore to be chiefly committed to Nature, which, with the aſſiſtance of diluent drinks, and the kindly relaxing warmth of the bed, will ſeparate and throw off the morbific matter. At the cloſe of the diſeaſe, indeed, purging will be neceſſary, and ought to be repeated two or three times before the patient be allowed to return to the uſual courſe of life.

But, beſide this mild ſcarlet fever, which is attended with ſo little danger, there has of late years been obſerved a malignant ſcarlet fever, that generally proves fatal. In this diſeaſe, which is a highly putrid fever, accompanied with inflammation, the morbific matter is found to fall particularly heavy on the glands about the fauces, there producing a gangrenous ulceration; it infallibly proves mortal if the caſe at firſt happens to be miſtaken for a ſimple inflammation, and, in conſequence, is treated with repeated bleedings, purging,

ing, and cooling medicines; hence the neceſſity of diſtinguiſhing the varieties of the ſcarlet fever.

1. *Scarlatina benigna*; as above deſcribed.

2. *Scarlatina urticata*, ſeu *febris eſſeroſa*; wherein the red eruption is intermixed with itchy blotches like the ſtinging of nettles. The fever here is uſually not more ſevere nor diſtreſſing than in the ſcarlatina benigna, and requires little or no interpoſition.

If the fever ſhould happen to run unuſually high in either caſe, it muſt be taken down by bleeding; and if it ſhould particularly affect the head, and bring on a coma or convulſions, (as ſometimes happens in young ſubjects) bliſters muſt be applied, with warm bathing of the lower extremities.

3. *Scarlatina maligna*; the malignant ſcarlet fever begins its attack with chilneſs, languor, ſickneſs, and vaſt oppreſſion; then ſucceed exceſſive heat, nauſea and vomiting, with a ſoreneſs in the throat; the pulſe is ſmall and depreſſed, but extremely quick; the breathing frequent and laborious; the ſkin exceedingly hot, but not perfectly dry; the tongue moiſt, and, eſpecially toward the root, covered with a ſoft whitiſh mucus like cream: if the fauces be inſpected, the tonſils will be found inflamed and ulcerated, though not greatly ſwelled. On the third day the efflorescence appears, but brings no relief; on the contrary, the oppreſſion, difficulty of breathing, and nauſea increaſe, oftentimes with a purging; and

the

the patient, who by this time begins to grow delirious, is either conſtantly toſſing in the bed, or lies in a comatoſe ſtate: the ſtrength, which hitherto has kept up more than might be expected, now entirely fails, the breathing becomes more laborious, and ſwallowing more difficult; and before the ſixth day, life ends by a ſuffocation; in ten or twelve hours after death the corpſe ſwells monſtrouſly, and the diſſolved cruor works out from the mouth and noſtrils.

This is one of the moſt fatal varieties of fever, the mixture of putrefaction and inflammation requiring ſuch contrariety of remedies, that little can be done for the patient's relief: bleeding and bliſtering, though they may procure ſome hours of eaſe from the oppreſſion and difficulty of breathing, do no permanent ſervice, and the former cannot be repeated; antimonials, even in the ſmalleſt doſes, are apt to bring on violent purging; and the progreſs of the diſeaſe is too rapid to expect much from the cortex, ſnake-root, or any other antiſeptic. Theſe are the means however which are propoſed, and when the diſeaſe is in a milder degree, may poſſibly reſcue the patient.

Some inſtances of the malignant ſcarlet fever were obſerved in Dublin this laſt ſummer (1776); and the benign ſort was exceedingly frequent; ſometimes paſſing through a whole family, though ſeldom mortal; though the ulceration of the tonſils was to be ſeen in every caſe, the ſcarlet efflorescence did not perhaps occur in more than half the patients;

patients; ſo that the diſeaſe might have been termed more properly *febris anginoſa* than *ſcarlatina*; and it is obſervable that in thoſe ſeaſons when the malignant ſcarlet fever appears, there are few other fevers that have not ſome mixture of the anginoſe ſymptoms. Dr. Huxham in his treatiſe on the malignant ſore throat (to which we refer) has given a very particular detail, and lays down the method of treatment which he found moſt ſucceſsful.—(See hereafter the article on the aphthoſe fever.)

CHAP. XVI.

Hiſtory of the Eryſipelatoſe Fever, and Method of Treatment.—Varieties.

THE *eryſipelatoſe fever*, ſo called from the ſuperficial inflammation that attends it, is generally preceded by cold and ſhivering, and then the heat, thirſt, and other common ſymptoms of a fever come on; the face, if that be the ſeat of the inflammation, ſwells of a ſudden with great pain, and ſhining redneſs; abundance of ſmall pimples appear, which often riſe up into little bliſters, and ſpread conſiderably over the whole head, the eye-lids in the mean while being cloſed up by the puffy ſwelling. The pain from the inflammation keeps up the fever, until both are taken off by proper remedies.

As in theſe caſes there is evidently a ſharp humour thrown off from the blood, and depoſited in the

the inflamed veſſels of the ſkin, from whence it ought to paſs off by exudation, there is great caution required not to ſink the fever too low by immoderate evacuations, nor prevent the diſcharge of the morbific matter by the imprudent application of cold or aſtringent ſubſtances.

The pulſe and the febrile ſymptoms ought to guide us with reſpect to bleeding and purging; the patient ſhould be kept in a perſpiring way, and lenient or ſoftening epithems and fomentations applied to the inflamed part. If the ſwelling ſhould ſuddenly ſink, and the acrid humour appear to ſtrike in, oppreſſion or anxiety come on, and the pulſe grow weak, then we muſt bliſter, give wine with freedom, and order the confectio cardiaca, or volatile alcaline ſalts and ſpirits, according to the exigency of the caſe.

While the eryſipelas is preceded and attended with only the common febrile ſymptoms, it is to be termed *Febris Eryſipelatoſa Benigna*; but when combined with unuſual and diſtreſſing complaints, ſuch as total loſs of ſtrength, great ſickneſs, oppreſſion, and violent pains in other places than where the inflammation appears, then it will require to be named accordingly, and we may term this variety *Eryſipelatoſa Maligna* ſeu *Peſtilens*.

A fever of this ſort raged in France in the year 1130, and deſtroyed multitudes; in ſome the inflammation ſeized the hands, in others the feet and legs, and in others the face. In 1716 an eryſipelatoſe fever of the malignant ſort prevailed

prevailed at Thoulouſe. Theſe are nearly akin to the plague, and very often, like it, end in ſwellings of the parotid and other lymphatic glands.

CHAP. XVII.

Miliary Fever. Hiſtory of the Diſeaſe, and Method of Treatment.—Varieties.—Aphthoſe Fever.

THE firſt accounts we have of the *miliary fever*, are of one that prevailed at Leipſic in the year 1650. Since that time it has been a frequent diſeaſe in moſt parts of Germany, Savoy, Switzerland, and Lombardy, as well as in theſe iſlands, though it is ſaid by Sauvages not to be common in France.

There are two kinds of miliary eruption, the white and the red, termed by the writers Purpura Alba, and Purpura Rubra, according as the minute puſtules appear to be filled with pellucid lymph, or with coloured ſerum; the two are often intermixed, but in both of them the fluid contained has a diſagreeable ſouriſh ſmell, and is ſaid to be very acrid to the taſte.

Some writers have contended, that theſe miliary eruptions are accidental, and do not ſpring from a ſpecific acrimony, ſuch as is acknowledged in the ſmall-pox and other eruptive fevers; however, moſt of the experienced practitioners among the Engliſh,

Engliſh, and many of the foreigners, are clearly of another opinion, and hold the miliary fever to be a diſtinct ſpecies, and that it is not to be confounded with the petechial or ſpotted fevers, which are only varieties of the putrid fever.

The morbific matter here, as well as in the ſmall-pox and meaſles, is often complicated with the inflammatory, nervous, or putrid fever; and hence the varieties of miliary fever.

When pure, and unmixed with the diſtinguiſhing ſymptoms of either of theſe three ſpecies, the miliary fever is to be termed,

1. *Miliaris Simplex*, ſeu *Benigna*; the ſimple miliary fever. The febrile ſymptoms previous to the eruption, are not very high nor diſtreſſing; no great pain, thirſt, or ſickneſs: the pulſe rather depreſſed and hard: they increaſe however gradually till the third or fourth day, when the eruption ſtrikes out, chiefly on the neck, back, and breaſt, being preceded by a profuſe ſweat, of a ſouriſh ſmell, and a particular tingling ſenſation in the ſkin, eſpecially in the fingers, and an itching in thoſe places where the miliary puſtules are moſt plentiful. In about thirty hours the eruption is full out, and replete with ſerum, with a ſlight inflammation round tbe baſis of the little veſicles, occaſioning a fulneſs and tenſion of the ſkin. The febrile ſymptoms now ſubſide, the patient continues to ſweat plentifully, and makes higher-coloured urine, the pulſe gradually becomes full, ſoft, and equable, and by the end of the week

the

the eruption dries up, and the cuticle falls off in ſcales.

The method of treatment conſiſts in keeping the febrile ſymptoms within proper bounds, if they ſhould happen to run too high and create great diſtreſs and oppreſſion; therefore bleeding, in the beginning before the eruption appears, will often be neceſſary, and muſt be proportioned to the patient's age, ſex, and degrees of ſtrength. After bleeding, ſaline juleps with a ſmall proportion of antimonial wine, or joined with powders of nitre and ſome of the abſorbents, and a very little of the ſtibiated tartar, will moderate the fever, and facilitate the expulſion of the morbific matter; and this julep, or powders, will be of further uſe, if the ſtomach ſhould happen to be loaded with ſaburra of any kind, as it will not fail in that caſe to excite vomiting, and thus abate the ſickneſs and oppreſſion. If, on the other hand, the fever ſhould appear to be rather languid, and to require ſomewhat of the cordial nature, wine-whey may be allowed for drink, with boluſes of confectio cardiaca, and an addition of the volatile alcaline ſpirits to the ſaline juleps. But theſe heating things muſt be given with great caution and moderation, neither muſt the patient be kept too warm, nor lie with more bed-clothes than are uſual in the time of perfect health.

If great oppreſſion ſhould be obſerved, or any conſiderable degree of delirium and coma ſhew the head to be much engaged, a bliſter muſt be applied;

ed; there being no ſpecies of fever wherein bliſters are ſo ſerviceable as in the miliary.

The *complicated miliary fevers* may be always known and diſtinguiſhed from the ſimple and benign, by the ſymptoms not giving way on the appearance of the eruption, but rather, on the contrary, becoming more numerous and diſtreſſing.

The complicated miliary fevers are moſtly epidemic; that deſcribed by Sydenham in his Schedula Monitoria, as appearing in ſpring 1685, may be termed,

2. *Miliaris catarrhalis*; it began with intervals of heat and cold, pain of the head and limbs, cough, ſoreneſs of the neck and throat, the pulſe all this while not much unlike that of a healthy perſon, but the blood that was drawn had the inflammatory cruſt. It is not ſaid on what day of the fever the miliary eruption appeared firſt; and Sydenham was of opinion that though ſometimes it might be conſidered as ſpontaneous, yet frequently it ought to be aſcribed to the warmth of the bed and cordials.

His method was firſt to bleed; but this was not repeated unleſs the cough and difficulty of breathing increaſed ſo as to require it, for he obſerved that this fever did not well bear repeated bleeding. But bliſtering and purging agreed perfectly well, and accordingly, after ſome ounces of blood had been taken away, he bliſtered between the ſhoulders, and the morning following gave a purging potion, which was repeated every other day for three times, an opiate being taken at bed-time after

after the operation. He carefully avoided ſudorifics, and did not ſuffer the patients to lie warm, nor to remain conſtantly in bed. A fever of this kind was epidemic in Britanny in the year 1757.

3. *Miliaris inflammatoria*; in this the inflammatory febrile ſymptoms go on increaſing after the eruption, the pulſe continues quick and hard, the urine pale and watery, and the ſkin becomes exceedingly hot, dry, and rough, the tongue white and dry, the face puffed up, and the head tormented with a ſevere internal pain, with delirium, inceſſant toſſing, and inability to ſleep.

It has been obſerved, that the more abundant the eruption, and the ſooner it appears, ſo much the more dangerous the ſituation of the patient.

4. *Miliaris ſcroſa.* As the preceding is complicated with an inflammatory fever, and ſeizes the robuſt and ſtrong, whoſe veſſels are full of denſe blood, ſo this is complicated with a ſlow or nervous fever, and ſeizes thoſe of a delicate habit with thin and ſharp juices.

In this the febrile ſymptoms are obſcure, and there is all that irregular variety of complaints and appearances which diſtinguiſh ſlow fevers, particularly the weak, quick, and unequal pulſe; urine ſometimes turbid, and ſometimes clear; trembling of the voice; ſtarting of the tendons; confuſion of the head; clammy ſweats, with a diſagreeable ſmell; the eruption never coming out, but ſeeming

ſeeming to lurk in the ſkin, without any ſign of inflammation, or remarkable degree of heat.

In theſe caſes the fever runs at leaſt three weeks; and it has been obſerved, that the perſons who have once had it, are very apt to be ſeized again, particularly women during their lyings-in. The method of treatment conſiſts chiefly in the liberal uſe of wine, and bliſtering.

5. A fifth variety may be termed *Miliaris Putrida*, ſeu *Petechialis*; when the miliary eruption is complicated with a putrid fever, and ſometimes intermixed with petechiæ. This diſeaſe is often ſeen in places where the infection of a putrid fever is apt to be communicated by people coming from hoſpitals, priſons, tranſport-ſhips, and ſuch confined places. The ſigns are to be collected from the deſcriptions of putrid fevers already given, as alſo the method of treatment. Bliſtering in theſe caſes cannot be expected to do any material ſervice; if any thing can be done, it muſt be by the cortex and wine.

Miliary fevers in general are often accompanied with a purging, which muſt be cautiouſly managed; for, if improperly checked by aſtringents, the febrile ſymptoms will certainly be exaſperated. In theſe circumſtances, the ſtrength muſt be ſupported by vinoſe cordials, and ipecacuanha given in very ſmall doſes at proper intervals.

It is obſervable, that people of robuſt habits and full of blood, thoſe who live high, or have juices contaminated with any ſort of acrimony, are more

more apt to be carried off by the miliary fever than thoſe of lax fibres, with watery fluids, and who uſe the leſs nouriſhing kinds of food.

The prognoſis in theſe fevers muſt be formed on the ſame principles as in every other ſpecies of eruptive fever. When we ſee the minute veſicles riſe high, and fill well, while at the ſame time we obſerve the anxiety or oppreſſion to abate, the head grow more clear, and free from pain, and the pulſe become ſoft and equable, we may ſafely conclude that things will terminate happily. But if, on the contrary, the ſickneſs and oppreſſion ſhould increaſe, the pulſe continue weak and hard, furious delirium, inceſſant toſſing, or convulſions come on, with pale urine, clammy cold ſweats, and ſinking of the miliary puſtules, we may look on the caſe as almoſt deſperate, though we muſt nevertheleſs endeavour by bliſtering, and the free uſe of wine and other cordials, to try, if poſſible, to procure the expulſion of the morbific matter, and determine it to the ſurface of the body.

FEBRIS APHTHOSA.—In the courſe of many miliary fevers, we frequently ſee *aphthæ* in the mouth, and ulcerations in the fauces, preying on the tonſils and uvula. Though there are alſo caſes wherein aphthæ ſupervene without miliary eruptions, and thus give a name to the fever: this, however, is moſtly ſeen during the ſtate of infancy.

In adult ſubjects the appearance of aphthæ and ulcers in the throat will require the uſe of deter-

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gent and ſoftening gargles made of decoction of figs, with the addition of honey of roſes, a little vinegar, and ſome tincture of myrrh. Mr. Penroſe,* who writes expreſsly on this ſubject, ſays, he always gives the vitrum antimonii ceratum, and finds it ſucceed in theſe putrid ſore throats, which are eaſily diſtinguiſhed by the appearance of the ulcerations, with white ſloughs, from the malignant and gangrenous ſore throat, that yields to nothing but the cortex, and wherein the edges of the ulcers are red and angry, with black ſloughs in the middle, and a ſhining redneſs all over the fauces.

A purging generally carries off the patient when the aphthoſe fever proves mortal.

CHAP. XVIII.

Hiſtory of the veſicatory Fever, and of the Plague, with the Methods of Treatment.

FORTUNATELY for the inhabitants of the northern parts of Europe, they are ſeldom viſited by the two remaining ſpecies of eruptive fever. The fever diſtinguiſhed by the eruption of *Bliſters* was epidemic at Prague in the year 1756, and in one of the Cantons of Switzerland in 1752, both of them very infectious, and fatal in their termination.

* Diſſertation on the inflammatory, gangrenous, and putrid ſore-throat.—By F. Penroſe, ſurgeon.

In the county of Wicklow, about twenty miles from Dublin, a diſeaſe of this kind (as the author has been informed) appeared in the year 1766, but attacked only children, many of whom were carried off, until the cortex was thought of as a remedy, and found equally efficacious as in the malignant ſore throat.

In the fever which raged in Switzerland, the bliſters appeared in the mouth and fauces, as well as on the ſurface of the body; in many, the neck inflamed, with the parotid glands, and ſometimes an abſceſs followed, which proved ſalutary if ſpeedily opened, and it happened to diſcharge itſelf freely; and it was obſerved that when the acrid ſerum was entirely thrown out on the ſurface of the ſkin, and the fauces were left free, that then there was no danger.

Abſceſſes in the inguinal or axillary glands, likewiſe ſaved life, when they chanced to be formed.

In Switzerland the phyſicians began the cure with one or two large bleedings, then bliſtered the head, laid cataplaſms on the neck, and endeavoured to raiſe ſweats by ſudorific medicines: in Bohemia, the only medicine that did ſervice was the acetum bezoardicum, and this is ſaid to have cured all who took it, while thoſe who truſted to other things died.

Of the Plague.

The word *Plague*, if taken in its extended ſenſe, may be applied to every kind of epidemic diſeaſe that

that happens to be unuſually fatal; our preſent intention however, is to deſcribe only that particular ſpecies of eruptive fever, wherein the ſalutary termination is by an inflammatory ſwelling of the parotid, axillary, or inguinal glands.

This appears to be nearly allied to the veſicatory fever, and is highly infectious; in many parts of Turky, the plague breaks out every ſix or ſeven years, but in theſe northern parts of Europe it makes its appearance but ſeldom.

It got footing in the ſouth of France in 1720; but the Britiſh Iſlands have eſcaped a viſit for more than a hundred years.

The plague of London in 1665, according to Morton's account, ſwept off 40,000 people. Sydenham relates, that when at its greateſt height, about the autumnal equinox, it deſtroyed near 8000 in one week, though at leaſt two-thirds of the inhabitants had retired into the country to avoid the infection.

If it were poſſible to prevent the general panic, and if people could be prevailed on to attend the ſick in the peſtilential fever, with the ſame unconcern that they do in every other ſpecies, there can be no doubt but the mortality would be greatly reduced, and perhaps be found not more than what follows from many diſeaſes of which the world does not entertain ſuch frightful ideas: for, let us only ſuppoſe, that in ſome of thoſe ſeaſons, when the mildeſt and leaſt dangerous of all epidemics,

the *Catarrhal Fever*, happens to prevail, an univerſal terror ſhould take place, and every body become impreſſed with a notion, that as ſure as they were attacked, ſo ſurely they muſt die; and if, inſtead of giving the neceſſary attendance, not only phyſicians, but even the neareſt relations would not venture to viſit thoſe ſeized with the diſtemper, and that theſe unhappy people ſhould be forcibly dragged from their own habitations, and ſhut up in loathſome hoſpitals; what muſt be the conſequence? Why, thouſands would undoubtedly periſh, partly through their own apprehenſions, and partly from the want of common ſuſtenance, as well as medical aid.

How much more terrible then muſt be the caſe, when a diſeaſe ſufficiently dangerous in its own nature is exaſperated by the prodigious terror that is annexed to the name of it, and from the methods and regulations that are uſually practiſed and inforced, with a view to prevent the ſpreading of the infection.

People in power ſhould be very cautious about alarming the public, if at any time a diſeaſe ſhould happen to break out that may entitle it to the appellation of Plague; and phyſicians of eminence ought, by their writings and every other method, to prevent, if poſſible, a general panic from taking place.

The peſtilential fever of 1665, as deſcribed by Sydenham, began with chilneſs, and a ſhivering like the fit of an intermittent; ſoon after ſucceed-

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ed violent vomiting, painful oppreſſion at the breaſt, and a burning fever, accompanied with its common ſymptoms, which went on increaſing, either till the diſeaſe proved mortal, or the kindly eruption of a bubo or parotis diſcharged the morbific matter, and ſaved the patient.

That which raged at Marſeilles and places adjacent in 1720, is deſcribed with more accuracy by the phyſicians ſent there by order of the French government, but appears to have been of the ſame ſpecies with the plague of London. On the firſt ſeizure, people ſeemed as if they were intoxicated with drink, entirely loſt the power of their limbs, and became ſo dejected that they gave themſelves over from the very firſt attack. Along with the bilious vomitings and purgings, which generally came on the ſecond day, quantities of ſmall worms like aſcarides were thrown off. The more plentiful theſe evacuations were, the more ſalutary; for thoſe who vomited and purged but little, ſunk down oppreſſed with the diſeaſe, and died before the fourth day, covered over with livid blotches and petechiæ; thoſe who had the largeſt evacuations, had alſo the moſt plentiful eruption of buboes and parotid abſceſſes. When theſe appeared, the patients roſe, walked about, and became remarkably hungry; the heat and thirſt ſubſided, but the face and eyes continued pale and languid, the pulſe hard and frequent. On the ſixth, ſeventh, or eighth day, if the ſuppuration ſtopt, and the tumours went back, then came on oppreſſion, difficulty of breathing, furious delirium, and convulſions, which ended in death.

Sydenham

Sydenham propoſes large and repeated bleedings, on a preſumption of the diſeaſe's being of the highly inflammatory nature, and relates ſome inſtances wherein this practice ſeemed to have averted the danger; in France they alſo bled largely in the very beginning of the attack, and repeated it according to the ſtrength; but the chief ſervice that appears to have been done was, by encouraging the vomiting with emetics of ipecacoanha, and the purging, by giving great plenty of ſheathing and diluent drinks.

Acrid or cauſtic applications to the buboes, and opening them by inciſion, did not anſwer, as theſe ſwellings did beſt when left entirely to Nature, or treated only with emollients: no perſon, ſeized in the violent way, eſcaped, but in conſequence of the morbific matter's ſettling itſelf on the parotid, axillary or inguinal glands, and ending in a complete ſuppuration. But in great numbers of people, tumours appeared without any previous febrile ſymptoms and in a few caſes went off by reſolution; in others they continued in a ſcirrhous ſtate, but it was beſt when the ſwellings came to a ſuppuration. Several thouſands at Marſeilles were affected in this manner, went about the city as if they ailed nothing, and only dreſſed their buboes with common applications.

When carbuncles or boils, with mortified ſloughs, appeared in different parts of the body, either alone, or accompanied with the glandular ſwellings, the patients ſcarcely ever eſcaped.

CHAP.

CHAP. XIX.

Hectic Fevers, their Deſcription; Diviſion into Species; and general Method of Treatment.

THE *hectic fever*, on account of its ſlow progreſs and long continuance, is placed by Morton in oppoſition to all the other genera; and not improperly, ſince there is not only a remarkable difference in the courſe of the diſeaſe, but alſo a material circumſtance wherein the hectic differs from a continued, intermittent, remittent, and eſpecially from an eruptive fever: in all theſe the morbific matter is either capable of being ſubdued and aſſimilated, or of being ſeparated and thrown off, by the pure efforts of Nature, in conſequence of which, a recovery often enſues; but in the hectic fever, we are never to expect any ſuch favourable termination, by the mere force of the natural powers, for in this genus, though there may be periodical and plentiful diſcharges by different outlets, yet none of them appear to be critical; and unleſs we can either correct the morbific matter which irritates the vaſcular ſyſtem, or cut off the ſource and prevent its being repeatedly abſorbed, the fever will continue, with daily exacerbations, ending in profuſe ſweats, or colliquative diarrhœa, until the fleſh ſhall be totally waſted, and the ſtrength entirely exhauſted.

It was formerly mentioned, that the nervous ſyſtem appears but little diſordered in hectic fevers, and

and that the diſeaſe ſeemingly conſiſts in mere agitation of the blood and irritation of the heart and vaſcular ſyſtem; the acrimony which irritates, and creates this intenſeneſs of motion, appears, in ſome caſes, from the fever's being conſtant, to be intimately mixed with the general maſs; in others, where there are remiſſions, or complete intermiſſions, it ſeems to be taken up, occaſionally, by abſorption from different cavities and receptacles, where it lies in the intervals of the paroxyſm. Hence it is, that ſome authors, particularly Dr. Cullen, do not conſider the hectic fever as an original diſeaſe, but look on it as ſymptomatical or ſecondary.

Since little or nothing ſalutary is to be expected from the pure efforts of Nature, the cure of hectic fevers muſt depend on artificial management; and as they run out to ſuch lengths, is to be attempted more in the dietetic than pharmaceutic way; courſes of goat's whey, aſs's milk, and freſh buttermilk, with the Seltzer, Briſtol, and Mallow waters, are thoſe which are uſually preſcribed in hectic caſes; oftentimes the cortex is given to advantage, and is found to moderate the ſweats, and prevent the violent paroxyſms of the fever; but nothing contributes more to the recovery of health than a clear country air, cheerful company, and the exerciſe of riding, or, which is ſtill better, that of ſailing.

This was a favourite practice of the ancient methodiſts, (as may be ſeen in Cælius Aurelianus) and has of late years been revived, oft times with happy effects; and no doubt, if begun in proper ſeaſon,

ſeaſon, before the diſeaſe has advanced too far, taking a voyage to ſea might be found to prolong the lives of numbers, who are threatened with, or actually labour under a hectic fever. *

This is the general ſcheme of management, but there will ſometimes be a neceſſity for other means, according to the various exigencies of the caſe, and particular ſpecies of the diſeaſe.

There are two ſpecies of hectic fever, *phthiſis* and *tabes*.

Some writers make no difference, but uſe the terms Phthiſis and Tabes as ſynonymous, to expreſs what we underſtand in common language by the words Conſumption and Decay; but it is better to make a diſtinction, and under the name of Phthiſis conſider that hectic fever which is accompanied with a cough, and other pulmonic complaints; and under that of Tabes, all the other varieties which are not ſo attended.

CHAP.

* See this matter particularly explained, and illuſtrated by a number of ſucceſsful caſes, in Gilchriſt's Eſſay on the uſe of Sea Voyages in Medicine. The reader is alſo referred to three excellent papers, for a number of important obſervations, and directions for the management of hectic fevers, one by Dr. Heberden, in the 2d vol. of the Medical Tranſactions, and two by Dr. Fothergill in the 4th and 5th vols. of the London Medical Obſervations.

CHAP. XX.

Of the Phthiſis; Deſcription and different Varieties, with the Methods of Treatment.

THE *phthiſis*, in general, may be known by an obſtinate cough, which is moſt diſtreſſing during the night ſeaſon, ſometimes dry, but oftener moiſt, and attended with an inclination to vomit, oppreſſion of the cheſt, and difficulty of breathing when the patient walks or ſtirs briſkly; by an habitual fever, increaſing always after eating, with a fluſhing and circumſcribed redneſs of the cheeks, while the reſt of the face is pale, thin, and looks as if it were not clean waſhed; the pulſe is always frequent, but at night becomes hard, and exceedingly quick, whence great heat of a peculiar kind, and dryneſs of the ſkin, particularly in the palms of the hands and ſoles of the feet, with thirſt and inability to ſleep; toward morning a ſweat breaks out, and procures a remiſſion of the febrile ſymptoms; at length a looſeneſs ſupervenes, the ſpitting leſſens, and the mucous or purulent matters appear to be carried downwards, the fleſh entirely waſtes away, the eyes ſink in their ſockets, the legs ſwell, the nails curve inwards, the hair falls off, and death ſteals on without being perceived by the exhauſted patient, who continues ſenſible to the laſt hour, and ſometimes even then entertains the falſe hope of prolonging a miſerable life.

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The phthiſis is ſo frequent in moſt parts of the Britiſh Iſlands that it may be held as endemic; it is alſo very often hereditary, the ſeeds of the diſeaſe or morbific diſpoſition of body being tranſmitted from parents to their offspring.

The ſigns which ſhew this diſpoſition are a weak and ſhrill voice, apt to become hoarſe on very ſlight occaſions, remarkable proneneſs to a cough, and hawking up of phlegm in the mornings; a narrow cheſt and high-raiſed ſhoulder-blades; a long neck, and white delicate ſkin, through which the blue veins appear diſtinctly; a circumſcribed florid redneſs in the cheeks; frequent bleeding from the noſe; a pulſe eaſily flurried, and breathing eaſily diſturbed: people ſo circumſtanced, as to ſhew all or moſt of theſe ſigns, if very particular attention be not had to the preſervation of their health, will fall into a pulmonary conſumption, ſome time between their ſixteenth and thirtieth year; but if they can, by temperance and care, and by living in a pure atmoſphere, diſtant from the ſmoke of large towns, get beyond their thirty-ſixth year, they may probably paſs the remainder of life with tolerable ſecurity as to a phthiſis.

The phthiſis is to be conſidered either as primary, or ſecondary coming on in conſequence of ſome preceding diſeaſe.

The varieties of the primary phthiſis are,

1. *Phthiſis ſicca*, wherein the cough, though exceedingly diſtreſſing, is not followed by any expectoration either of coloured mucus or purulent matter;

matter; what the patient ſpits up, until near the cloſe, is only a white frothy phlegm, and that but in ſmall quantities. Diſſections ſhew, that in theſe caſes the mucous and lymphatic glands, which are diſperſed in great numbers throughout the whole ſubſtance of the lungs, are enlarged and hardened, either forming earthy concretions or running into cluſters which do not ſuppurate kindly, but remain in a ſcirrhous ſtate, livid or dark coloured, and when cut into, a thick and purulent mucus, and coagulated blood ooze forth. The way to diſtinguiſh this from a common cough, or from a dyſpnœa, is, by attending to the waſting night-ſweats and febrile ſymptoms already deſcribed.

This dry phthiſis comes on by ſuch ſlow and imperceptible degrees, and the glands are ſo gradually ſtuffed up, that it is generally fatal; the means to obviate the danger, being ſeldom applied, or perhaps not even thought of, until it is too late to expect any great benefit from them.

In the beginning of the diſeaſe, before the ſcirrhous tubercles are actually formed, ſome patients may find advantage from courſes of goat's whey, with deobſtruent medicines, ſuch as the gum ammoniacum, combined with ſoap and the flores martiales; others will receive benefit from drinking ſea water, eſpecially if the habit be ſcrofulous; others again from courſes of Seltzer water, or the ſulphureous ſprings (as they are uſually termed) of Harrowgate, Moffat, Lucan, or Swadlinbar; and if with theſe courſes they uſe the exerciſe of riding, and have a ſtrict regard to temperance, there may be

be a probability of preventing the ſtagnation of lymph in the bronchial glands; but as theſe remedies are ſcarce ever applied ſoon enough to prevent the formation of the diſeaſe, we are obliged to have recourſe to them afterwards to prolong life, or palliate the complaints.

Setons or iſſues in this variety of phthiſis will be found ſerviceable, as they tend to obviate any degrees of plethora that may occaſionally happen to take place in the conſtitution; and for the ſame reaſon bleeding will often be required to free the breathing and procure relief from ſtitches that are apt to torment the patients.

2. *Phthiſis mucoſa*, ſeu *catarrhalis*; wherein the cough is accompanied with a remarkable expectoration, at firſt without ſmell, and of uncoloured viſcid mucus; but as the diſeaſe advances, what is thrown off in this way becomes fetid, yellowiſh, grey, or of a greeniſh caſt, has ſometimes a ſweetiſh, and ſometimes a ſaltiſh taſte.

The catarrhal phthiſis appears to proceed from a perverted ſecretion, too much mucus being thrown on the bronchial glands, which in time come to be ſo ſoftened and melted down, that the entire ſubſtance of the lungs, when theſe are inſpected after the patient's death, ſeems entirely waſted, and has very little appearance left of organic texture; hence the cure muſt conſiſt in reſtoring order to the ſecretions in general, and in ſtrengthening the whole corporeal frame.

For theſe purpoſes, nothing anſwers better than the cortex, aided by acid elixir of vitriol, chalybeate waters,

waters, and the other requiſites of pure air, moderate exerciſe, and cheerful company.

Theſe caſes, if taken in time, may be ſometimes cured, and even when the diſeaſe has made conſiderable advances, and has abſolutely formed itſelf, life may be prolonged for ſeveral years by purſuing the plan above-mentioned.

Gentle emetics are frequently required, and remarkably uſeful, not only to ſhake off the load of viſcid mucus and promote freedom of expectoration, but alſo, as a ſort of exerciſe to ſtrengthen the lungs; for the ſame reaſons, ſailing will be found to contribute greatly to the cure, or at leaſt mitigation of the diſeaſe.

3. *Phthiſis hæmoptoica*; it is common in all the varieties of phthiſis, to ſee the ſtuff that is expectorated now and then ſtreaked with blood; but there are ſome caſes wherein hæmorrhages from the pulmonary veſſels are ſo large and ſo frequent, as to give a diſtinguiſhing character to the diſeaſe.

Theſe frequent ſpittings of blood imply great weakneſs of the pulmonary veſſels, and great acrimony of the juices. The cortex therefore, and the Briſtol or Mallow waters, are the things to be chiefly depended on, with occaſional bleedings, and opiates interpoſed, according as the returns of hæmoptoe may demand.

There is no variety of phthiſis that requires living in a pure and ſettled atmoſphere ſo much as this does, nor any wherein temperance of every kind is to be ſo ſtudiouſly obſerved.

Theſe

Theſe are all the diſtinctions neceſſary to be made with reſpect to the phthiſis when conſidered as an original diſeaſe; when ſecondary, it will take its name and character from the diſeaſe on which it will be found to ſupervene; as,

4. Phthiſis ſcrofuloſa.
5. ——— ſcorbutica.
6. ——— aſthmatica.
7. ——— ſyphilitica.
8. ——— arthritica.
9. ——— hypochondriaca.
10. ——— chlorotica.

Any variation with reſpect to treatment, which theſe may ſeverally require, muſt be formed according to the particular diſeaſe that the phthiſical ſymptoms chance to be combined with, but which cannot now be mentioned, until the ſcrofula, ſcurvy, aſthma, lues venerea, gout, hypochondriaſis, and chloroſis themſelves have been deſcribed, and the methods of treatment laid down; neither can the nature of the *phthiſis à peripneumonia*, nor of the *phthiſis à vomica*, be well underſtood, until we have treated of inflammations of the lungs, and the ſuppuration ſometimes conſequent.

CHAP.

CHAP. XXI.

Of the Tabes; its different Varieties, and Methods of Treatment.

THERE is no neceſſity for being prolix with reſpect to the other ſpecies of hectic fever, as many of the denominations of the different varieties, like thoſe of the ſecondary phthiſis, are taken from the diſeaſe with which the tabes happens to be combined, as ſcrofuloſa, ſyphilitica, &c. though there are ſome which deſerve to be particularly pointed out, as,

1. *Tabes hepatica*; which ſucceeds an infarction or ſuppuration of the liver. The ſallow or yellowiſh colour of the ſkin, the yellow or browniſh ſediment in the urine, joined to a dull pain or ſenſe of heavineſs, and fulneſs in the right hypochondrium, are the ſigns of an affected liver. A cough very frequently accompanies the foregoing ſigns, and may ſometimes make the diſeaſe paſs for a phthiſis, which will then be termed Hepatica; but as the nature of this variety of tabes cannot be well underſtood without a previous knowledge of the hepatitis, or inflammation of the liver, which it generally ſucceeds, no more ſhall be ſaid of it until we come to treat of that diſeaſe: in the mean while however, we recommend a moſt uſeful paper on diſeaſes of the liver, by Dr. Heberden, publiſhed in the 2d vol. of the Medical Tranſactions.

2. *Tabes*

2. *Tabes meſenterica*; the ſigns are equivocal, but a tenſe ſwelling of the belly, and a frequent diarrhœa, joined to the common hectic ſymptoms, may be reckoned pretty ſure tokens of an infarction or ſuppuration of the meſenteric glands. Theſe caſes are almoſt without exception ſcrofulous, and therefore the full conſideration muſt be referred to the primary diſeaſe, which will come in courſe under the order of cachexiæ.

3. *Tabes dorſalis*; a conſtant ouzing of mucous and ſeminal fluids from the urethra, and frequent nocturnal emiſſions; pain in the ſmall of the back, with a ſenſation of ſomewhat creeping down the ſpine; coſtiveneſs, and difficulty in making urine, joined to the common ſymptoms of tabes, may ſerve to diſtinguiſh that which ariſes from libidinous exceſſes. This diſeaſe is properly ſexual, and therefore belongs to the third claſs; however, we may obſerve in the mean time, that the cure of the tabes dorſalis is ſeldom perfected, as the patients never apply in time, and when they do ſeek for medical aſſiſtance, they are rarely found to have reſolution ſufficient to abſtain from the exceſſes that firſt brought on the diſeaſe; and without ſuch abſtinence there will be no poſſibility of removing the complaints.

If application be made before the febrile ſymptoms come on, the cure may be attempted by a courſe of aſs's milk, with chalybeate waters and the cold bath; but after the hectic heats and colliquative ſweating have actually taken place, there is little proſpect of ſaving the patient.

4. *Tabes ab apoſtemate*, ſeu *ulceroſa*; when the purulent contents of an abſceſs, or the matter of an ulcer in any part of the body, happen to be abſorbed, a hectic fever infallibly enſues.

When practicable, the cauſe is to be removed by opening the abſceſſes, and dilating the fiſtulous ſinuſes which confine the purulent matter, and ſometimes by entirely extirpating the part which ſupplies the purulent fomes.

But when the ſource cannot be cut off by any of theſe means, then we muſt try to correct the acrid and putrefactive nature of the matter, by a liberal uſe of the cortex, to which it will be neceſſary to join the common dietetic remedies neceſſary for tabid caſes in general.

5. *Tabes verminoſa*; worms in the alimentary canal are a frequent ſource of the tabes, eſpecially in younger ſubjects.

The ſpecies of worms that are moſt commonly met with in the human body are four: 1. The long round worm like the lumbrici, or common earth worms. 2. The flat and ſhort white worm, like a gourd-ſeed. 3. The tænia, or long tape-worm, flat and jointed, ſometimes voided ſeveral yards in length; and, 4. The aſcarides, ſmall white worms, with ſharp pointed heads, that neſtle in the lower part of the rectum.

Beſide the general ſymptoms occaſioned by worms, it has been obſerved, that ſudden gripings about the navel denote the preſence of the lumbrici; a ſenſe of weight in the belly, as if a ball were

were rolling about in it, is held a ſign of the tape-worm, more eſpecially if the gourd-worms are voided from time to time: and itchineſs about the anus, with a teneſmus, are ſigns of the aſcarides. (See Dr. Heberden's paper in the 1ſt vol. of the Medical Tranſactions, for a number of moſt uſeful remarks on worm caſes in general, and the aſcarides in particular.)

Such are the ſymptoms uſually attending the particular ſpecies, but in general, an inflation of the ſtomach, an uncertain and variable appetite, ſometimes voracious, and then again defective, irregular pulſe, ſtinking breath, whitiſh and turbid urine, and fluſhing of one cheek in a circumſcribed ſpot, frequent rubbing of the noſe, and grinding of the teeth during ſleep, may be held as pretty ſure ſigns that there are worms, and may authoriſe the preſcription of anthelminthic remedies.

The three firſt-mentioned ſpecies that inhabit the ſmaller inteſtines, or neſtle in the colon, are to be diſlodged by mercurials, * or by the filings of tin, firſt exhibited, and then wrought off by a briſk cathartic: the age and ſtrength of the patient muſt determine the doſe. Afterwards, a light tincture of the hiera picra will be found of great ſervice in

* A very convenient and efficacious way of adminiſtering mercury in worm caſes, is by diſſolving corroſive ſublimate in water, thickening this ſolution with crumbs of bread, and afterwards forming the paſte into pills, containing each an eighth part of a grain of the ſublimate.—See the Edinburgh Phyſ. and Lit. Eſſays, vol. 3. art. 15.

preventing a relapſe; or an infuſion may be made in wine or beer, of the ſemen ſantonicum, rhubarb, and ſena, and taken daily in a quantity ſufficient to keep the belly open.

The tape worm has ſuckers at every joint, by which it is ſuppoſed to adhere to the inteſtines, and hence the great difficulty of diſlodging it. In Guiana they uſe a remedy, which, at firſt view, one would be apt to think hazardous; the ſpicula of the ſiliqua hirſuta, or couhage, mixed up with melaſſes or honey to the conſiſtence of a thin electuary: the patients, if adults, take two tea-ſpoonfuls for three ſucceeding mornings faſting, and then purge it off with rhubarb. (See Bancroft's Hiſtory of Guiana.)

In Sweden it has been found, that drinking ſome gallons of very cold water in the ſpace of an hour or leſs, and then immediately taking a large doſe of ſome draſtic purge, has brought off long tape-worms; but it is neceſſary that the patients ſhould habituate themſelves to the cold water in ſmaller quantities for ſome days before they venture to take that large doſe of it, which is neceſſary to make the worm quit the hold which it has, by means of its ſuckers; for it is ſuppoſed that the ſudden application of ſo much cold water has this effect on the worm, and leaves it ready to be ſwept away by the ſubſequent deluge of humours, derived into the inteſtines by the force of the cathartic.

Drinking largely of the natural purging waters, ſuch as the Cheltenham and Epſom, or thoſe which are found in the wells in ſome parts of the city of Dublin,

Dublin, would probably anſwer ſtill better than the Swediſh method, and be attended with leſs hazard: for if the cathartic ſhould not operate quickly, ſuch a load of cold water in the body might be productive of ill conſequences.

In Dr. Heberden's paper, which is referred to above, there is a very remarkable caſe of a perſon reduced to the laſt extremity by worms, who was cured by taking at one doſe, two pounds of common ſalt diſſolved in as much water as was capable of making the ſolution. This method of treating worm caſes is alſo practiſed by the common people in this country.

There is alſo another remedy for the expulſion of the Tænia, which made ſuch noiſe lately in France, that the faculty there adviſed the king to purchaſe the receipt from a madame Nouffer, widow to an apothecary at Morat in Switzerland. It appears however to be but an old noſtrum, as we may ſee in Geoffroy's Materia Medica, vol. 3. page 476. underthe article Filix; ſince Nouffer's ſecret turns out to be the root of the Filix Mas, powdered and given to adults, in a doſe of three drachms: the patient is prepared, by a meal of light panado; in eight or nine hours afterwards, the doſe of powdered filix is to be ſwallowed, and, in two hours more, a bolus of twelve grains of the *Panacea Mercurialis*, as much ſcammony, and five of gutta-gamba, made up with confection of hyacinth.

The patient is only to drink a diſh or two of light green tea, until the cathartic begins to operate;

rate; then a ſingle diſh of the ſame tea is to be taken from time to time, and nothing more, until the worm ſhall be diſcharged by the force of the purging. This doſe is to be repeated according as neceſſity may require, if the firſt ſhould not ſucceed in diſlodging the worm.

Meſſrs. Laſſone, Macquer, de la Motte, &c. who ſign the paper containing directions for the adminiſtration of this remedy, have promiſed to give the public an account of its ſucceſs, and to add further inſtructions, as well with reſpect to diſtinguiſhing the caſes wherein it is proper to be exhibited, as to the management of the patients.

None of theſe methods will ſerve to diſlodge or deſtroy the aſcarides, which require the injection of clyſters, compoſed of decoctions of wormwood and rue, in oil, with a ſmall quantity of aloes diſſolved, or, which is ſtill more efficacious and certain, blowing the ſmoke of tobacco by a proper contrivance into the rectum.

When tabid ſymptoms have been produced by worms, health will ſoon be reſtored, after theſe are diſlodged, if the viſcid ſlime which loads the inteſtines, and favours their generation, be alſo removed, and hindered from collecting again; for this purpoſe it will be neceſſary to keep the patients for a few weeks on a courſe of lime-water and ſtrengthening bitters, with ſome of the preparations of ſteel.

It is to be obſerved, that in all the varieties of conſumption, the waſting, weakneſs, and loſs of appetite,

appetite, are often evident for a conſiderable time before the febrile ſymptoms are perceivable; but as a hectic conſtantly ſupervenes, it is wrong to conſider the phthiſis and tabes in any other light than as ſpecies of this genus of fever, or to place them, as Sauvages hath done, in another order of diſeaſes.

A METHO-

A

METHODICAL INTRODUCTION

TO THE

PRACTICE

OF THE

ART OF MEDICINE.

BOOK II.

INFLAMMATIONS.

CHAP. I.

General Methods of treating Inflammations.

HAVING ſhewn the practice in fevers, we now come to that which is required in caſes of inflammation.

Though the different ſeat of the diſeaſe, and other circumſtances, will ſometimes vary the method of treatment, yet there is a general ſcheme of management with reſpect to inflammations, let them be ſeated where they will, which muſt be adapted to the particular ſtage or period of the diſeaſe.

Methods

Methods to promote a Reſolution.

When we laid down the theory of inflammations in general, the different ways in which they terminate were then explained: the firſt, is by reſolution, and this, when practicable, is what we are always to aim at; except in caſes where it is found that the inflammation is owing to the expulſion of ſome acrid matter from the blood, in the way of criſis.

Bleeding is one of the principal means uſed to check the progreſs of an inflammation, and drawing off a large quantity of blood will always, for a time, allay the general intenſeneſs of motion in the vaſcular ſyſtem, and abate that exceſs of heat which is a neceſſary conſequence; but it will not always calm the local intenſeneſs, or leſſen the degrees of oſcillatory motion in the veſſels where the inflammation is ſeated: we therefore have recourſe alſo to local bleedings, which, though the quantity thus taken away be but ſmall, are found of more immediate ſervice in abating the inflammation, than taking a conſiderable number of ounces from the arm. Theſe local bleedings are accompliſhed by leeches, or by cupping with ſcarification.

But ſmart purging is, in general, a more certain means of abating an inflammation than even bleeding; for, in this way, large derivation may be made, in conſequence of which, the inflamed veſſels will return to their natural rates of motion, and recover their due degrees of ſtrength.

Nitre,

Nitre, as being the moſt powerful cooler in the Materia Medica, is frequently given, though not always with ſucceſs; for though it may have conſiderable powers in allaying the general heat, yet it does not ſeem to have much virtue in abating that which is local.

In external inflammations, where we can avail ourſelves of topical remedies, the application of things which have an emollient and ſedative quality will be neceſſary, where the predominant cauſe of the diſeaſe is exceſs of the oſcillatory motion.

But when an inflammation is ſeated internally, ſo as not to admit the immediate application of topical ſedatives, nothing is more effectual in procuring a reſolution, than laying on a bliſter where the pain is felt, or as near to it as the nature of the caſe will allow.

Or, if the pain be leſs urgent, and bliſtering ſhould be deemed too ſevere, then, rubbing with volatile liniment, laying on bags of flannel filled with hot ſalt, or applying ſome ſtimulants by way of poultice, muſt be ſubſtituted in the room of bliſters.

Diſcutient fomentations are chiefly to be depended on in ſuch inflammations as ſucceed wounds, bruiſes, fractures, and the like external injuries.

But there ought to be ſome attention given in regard to continuing the uſe of fomentations, leſt they be protracted beyond the due time; for then they will do harm, by creating an additional laxity of

of the fibres, to which will ſucceed weakneſs, and obſtinate ſwellings.

Theſe are the means whereby we may hope to ſucceed in procuring the reſolution of an inflammation, when it is owing more to an increaſe of oſcillatory motion than to a defect of the reſiſting power; but in thoſe caſes which evidently depend moſt on relaxation, and weakneſs of the veſſels, we are to be more ſparing with reſpect to bleeding and purging; we ſhould alſo omit the application of emollient and warm fomentations, and depend on aſtringents, repellents, and ſtrengtheners.

Strengtheners are alſo required in caſes of inflammation which are owing to exceſs of oſcillatory motion, as ſoon as this ſhall be allayed by the means already propoſed.

The external ſtrengtheners uſually conſiſt of ſolutions, and mixtures of white vitriol, alum, ſaccharum ſaturni, or Goulard's extract of lead, lapis calaminaris, and tutty, in roſe or plantain water; alſo tincture of roſes and infuſions of balauſtines, and of pomegranate peel: theſe are occaſionally made into eye-waters and gargles, for ſuch ſpecies of opthalmy and quinſey as ſhew plainly that the fault lies chiefly in the weak and relaxed ſtate of the inflamed veſſels: theſe diſeaſes often require the uſe of internal ſtrengtheners, the principal of which is the cortex, aided by cold bathing.

Bliſtering, though frequently ordered in theſe caſes, is not found to be of that immediate ſervice

as

as in the inflammations which proceed from a predominancy of the other conjunct cauſe.

Management in Caſes of Exudation.

So far with reſpect to the methods which are to be purſued, while there are hopes of a reſolution; but from calling to mind the progreſs of an inflammation, it is eaſy to underſtand, that unleſs we are happy enough to ſucceed in procuring this deſirable termination early, it will ſoon be too late to expect it; it is therefore only within the firſt four or five days (unleſs the degree of inflammation be inconſiderable, and proceeding chiefly from relaxation) that we are to purſue the methods directed for procuring a reſolution; after that, if the ſymptoms ſtill continue to grow more diſtreſſing, the beſt that can be done is, to favour the exudation, when the ſeat of the diſeaſe, and nature of the part affected, will allow that way of termination; which, as hath been formerly explained, is when the veſſels that run on or near the ſurface of different parts, are thoſe which have been ſeized by the inflammation. In theſe caſes, the pores, and open orifices, ouze out a quantity of humour, which ſeems to be a compoſition of coagulable lymph diſſolved by the inflammatory heat, oil from the adipoſe cells, mucus, and the ſerum of the blood, all blended together, and wrought up into a fluid of a peculiar kind.

If the inflamed part be one of thoſe that are naturally ſupplied with lymph and mucus, for the purpoſes of keeping the membranous coverings in a ſtate

a ſtate of moiſture, the diſcharge by exudation is generally very conſiderable.

Perſons converſant in the diſſection of morbid bodies, have frequent occaſion to ſee collections of this exuded matter in the abdomen, where it has ouzed from the pores on the ſurface of the pæritoneum, or of different viſcera which have been inflamed; and in the thorax, where it has exuded from the pleura or ſurface of the lungs, without any viſible breach, ulceration, or diſſolution of the ſolids.

On ſome occaſions, however, this purulent matter which is thrown off by exudation does acquire a degree of ſharpneſs ſufficient to melt down the ſolids, and form ſuperficial ulcers; and when the more ſubtile part of it is exhaled, it frequently leaves whitiſh or yellowiſh ſloughs behind, adhering like a membrane to the ſurface of the inflamed part.

There is no certain way of knowing when an inflammation terminates by exudation, except in ſuch caſes as allow the matter to diſcharge itſelf; for, when it is pent up in the thorax, or any other cavity, it will be impoſſible to tell how things are, until a new train of ſymptoms ſhall ariſe; as the pain and heat, and the ſymptoms which neceſſarily attend them, will ſubſide, when the inflamed veſſels thus get rid of their load, and are freed from the diſtenſion.

But matters ſeldom remain long in ſuſpenſe; ſince the hectic fever, which infallibly ſucceeds, will

will ſufficiently ſhew that there is a purulent fomes.

They are caſes of external inflammation only, wherein any material aid can be afforded, when the diſeaſe terminates in this way; and here, the general ſcheme muſt be to facilitate the diſcharge, ſo as to let the purulent matter entirely paſs off; to moderate the remaining force of the inflammation, and prevent any deſtruction or ulceration of the ſolids.

Hence, the ſame means that were propoſed for procuring a reſolution, muſt ſtill be purſued, to a certain degree; and we muſt repeat the bleedings, and give cathartics, according to the violence of the inflammation, and according as there appears to be more or leſs of a flow of humours to the inflamed part.

The topical applications here conſiſt of lotions, epithems, cerates, unguents, and injections; the compoſition of which muſt be varied according as they are intended to cleanſe, to heal up, or to ſtrengthen.

Management of an Abſceſs.

When the caſe is ſo circumſtanced as to render an abſceſs not only unavoidable, but deſirable, and where we can avail ourſelves of topical applications, the buſineſs then is, to hinder the diſſipation through the pores of the inflamed part, and to add to the heat of the fluids there accumulated, in order to promote the fermentation, and render the humours more active in melting down the ſolid

ſolid lamellæ; it is therefore proper to apply things which ſhall not only ſoften the teguments, but alſo clog up the pores, and gently ſtimulate, with the deſign of increaſing the heat.

In proportion as the matter of the abſceſs accumulates, it enlarges the cavity that contains it, and this enlargement is moſt on the ſide where there is leaſt reſiſtance; hence it is, that collections of matter which are formed in the abdominal viſcera moſtly point outwards, while thoſe that take place in the lungs, with very few exceptions, burſt internally, on account of the reſiſtance made by the ſides of the thorax; and when a deep-ſeated abſceſs in any fleſhy part of the body is covered with an aponeuroſis, the matter runs along the interſtices of the muſcles, until it arrives at ſome place where there is but little reſiſtance, and then puſhes out, perhaps at a conſiderable diſtance from that which was the original ſeat of the inflammation.

Theſe abſceſſes hitherto ſpoken of, are ſuppoſed to ariſe gradually, from an inflammation proceeding through its regular ſtages; but there are others which make a more ſudden appearance, and ſeem as if the matter, with which they are filled, were thrown off ready formed, from the general maſs of circulating fluids; ſuch abſceſſes are uſually preceded by a fever, and prove ſalutary when they do not take place in any organ of importance.

If there happens to be any part of the body where the veſſels have ſuffered from a preceding inflam-

inflammation, or have had their fibres weakened by ſome external injury, the critical abſceſs will ſettle in that place.

In whatever way the abſceſs happens to have been formed, whenever it is ſufficiently ripened, which will be known by the pointing of the tumour, ſoftneſs of the teguments, and fluctuation of the contained fluid, it ought to be opened, leſt the purulent matter, being pent up, might go on to melt down too much of the ſolids, and perhaps deſtroy the texture of nerves or blood-veſſels, or get through the perioſteum, and bring on a caries of the bones, if any are near; or, being abſorbed, and carried back into the circulation, give riſe to an hectic fever. We ſhall ſee hereafter, however, that there are caſes, eſpecially in ſcrofulous habits, where it is a much ſafer practice to delay the opening of abſceſſes, and leave the affair entirely to nature.

Management of Gangrenes.

In habits where the juices are uncommonly ſharp, and the force of the inflammation ſo extremely violent as to deſtroy the texture of the veſſels, inſtead of only enlarging their pores, then a gangrene will take place.

It has been already ſhewn, that, in caſes of ſuppuration, the ſolids which are melted down are only inert ſolids, nothing more than laminæ of the tela celluloſa, and veſicles containing the fat; whereas, in thoſe of mortification, the texture of the nerves and veſſels is altogether deſtroyed.

The ſcheme to prevent an inflammation from running into a gangrene will differ according to the firſt ſource of the diſeaſe, the patient's conſtitution, and the natural ſtrength of the veſſels.

If the inflammation was brought on by ſome external injury, and the patient be one whoſe fibres are remarkably ſtrong and rigid, and whoſe blood is denſe, the pulſe quick, full, and hard, with high degrees of heat, pain, and dryneſs, we ought to repeat the bleedings, and perſiſt in the uſe of antiphlogiſtic remedies, even after we are certain there can be no hopes of a reſolution, and though we find that at leaſt a ſuppuration muſt enſue; ſince by theſe means we ſhall perhaps be able to divert the too violent force of the blood from the veſſels of the inflamed part, and ſo hinder them from being actually ruptured: at the ſame time, the application of emollients, in the ways of fotus and cataplaſm, will contribute to relax the fibres, and favour the tranſudation from the pores in the coats of the inflamed arteries.

But if it ſhall appear, that the fluids are in an acrid or putreſcent ſtate, which may be inferred from the appearance of the blood which is drawn (not parting, as it ought to do, into ſerum and craſſamentum) from the weak pulſe, loſs of ſtrength, dejection of ſpirit, and fetid ichorous diſcharge, then the moſt likely method either to prevent a gangrene from coming on, or to facilitate the ſeparation of the mortified part, is to give the Peruvian bark, with wine, or with acids, according as the ſtate of the pulſe and other circumſtances of the patient may require.

It

It is too ſyſtematical to conſider a mortification as always connected with inflammation, ſince it is frequently found to be the reſult of ſome particular depravation of the juices, and is then to be held as a diſtinct genus of diſeaſe. For this reaſon, we ſhall not now proceed any further in the method of treatment, but reſerve it for the ninth Book.

For as it often happens, that purulent matter ſhall, by an effort of Nature, be thrown off from the circulating fluids, under the name of a Critical Abſceſs; ſo, in like manner, it is ſometimes ſeen, eſpecially toward the cloſe of putrid fevers, that an exceedingly acrid matter ſhall ſuddenly be depoſited on the veſſels of a particular part, and corroding them, produce what may be termed a Critical Mortification, which inevitably deſtroys life, if the part ſo loaded happens to be an organ immediately neceſſary to the general œconomy; whereas, if this cauſtic matter be thrown out to the ſurface, or ſhall fix on ſome of the extremities of the body, then the expulſion of it may prove the means of preſerving life, at the expence of ſome of the limbs.

There are alſo ſome aſtoniſhing inſtances of mortifications coming on ſo very ſuddenly, that the fever or inflammation, if any degree of either preceded, have paſſed unobſerved; and the firſt notice the patient has had of the diſeaſe, has been from the coldneſs, inſenſibility, and diſcolouring of the part affected.

Management of indolent Swellings.

The injudicious and protracted uſe of hot fomentations often invites ſuch a flow of humours, and relaxes the fibres to ſuch a degree that they give riſe to ſwellings, which prove tedious, and difficult to remove: this is frequently ſeen after fractures, luxations, or other external injuries that have been attended with inflammation at the beginning; and in glandular parts, where the circulation is naturally languid, it often happens that a ſuppuration either ſhall not enſue, or if it does take place, ſhall not be ſo complete as to melt down enough of the ſolids, in order to remove the ſwelling and hardneſs. But in theſe glandular ſwellings, there is ſometimes a mixture either of the ſcrofulous or venereal taint, each of them demanding a diverſity of treatment, adapted to the particular diſeaſe.

In the caſes of indolent ſwelling, which have no dependence on either of theſe ſpecies of acrimony, and where there appears to be nothing amiſs, with reſpect to the ſoundneſs of the fluids, if the hardneſs be ſo conſiderable as to require particular attention, nothing anſwers ſo effectually as expoſing the part affected to warm vapour or ſteam, confined by proper contrivances, and directed to the place where the hardneſs and rigidity ſubſiſt.

If the ſwelling, on the contrary, be œdematous, or ſoft and flabby, then, pumping cold water on the part, dry frictions, and well-adapted bandages, when

when they can be applied, will bid fair to reſtore things to the healthy ſtate.

But we ſhall often meet with caſes of monſtrous ſwelling of the limbs, ſometimes of the œdematous kind, indolent and without much pain; and at other times extremely painful, and tending to inflammation, which depend on ſome diſorder of the lymphatic glands, that are lodged in different places; eſpecially the groins, and arm-pits, or inſide of the thigh. Though we do not know enough of the ſtructure of theſe glands to enable us to ſay how they influence the circulation of the lymph, yet their ſoundneſs appears to be abſolutely neceſſary for allowing this fluid to return with freedom, by the lymphatic veins, from the cellular interſtices of the parts below them: in all caſes therefore of ſwelled legs, or arms, it will be requiſite to examine particularly the ſtate of the glands in the places above-mentioned, in order to find out if any hardneſs, or tumor, be perceivable among them; for if any ſuch ſhould be found, then, the readieſt way to remove the ſwelling, will be to apply emollients to the diſeaſed glands, and pay little regard to the limb itſelf.

People converſant in the practice of midwifery, frequently meet with ſwellings of one, or ſometimes both legs, in women who have lately lain in; and they are uſually aſcribed to the milk's going aſtray; poſſibly, it may be ſo; but very often, upon examination, we ſhall find the ſwelling entirely dependent on the glands, as above-mentioned, and can trace the painful and over-

diſtended

diſtended trunks of the lymphatic veins all the way up, along the leg and thigh : and when we ſhall thus be ſatisfied of the true ſource of the diſorder, we may be certain of ſpeedily relieving the patient, by repeated purging, and the application of emollient cataplaſms, and liniments to the glands : whereas, if the true ſource be overlooked, and the applications be made to the diſeaſed limb only, the ſwelling may continue for many months.

CHAP. II.

Deſcriptions, and Methods of Treatment of the different Species of external Inflammation, which have no fixed Seat.—Phlegmon, Eryſipelas, Boil, Carbuncle.

WHEN we treated of inflammations in general, it was propoſed to make only two generical diſtinctions, *external inflammation*, when the inflamed part being either in view, or within reach, we can avail ourſelves of topical applications; and *internal*, wherein the cure muſt depend on general evacuations, and the uſe of internal remedies.

Such inflammations as have no fixed ſeat, but appear indifferently on any part of the external ſurface, are diſtinguiſhed into ſpecies, according to the nature and extent of the diſeaſe, and are known by the names of *Phlegmon*, *Eryſipelas*, *Boil*, and *Carbuncle* ; thoſe which are ſeated in the veſſels of ſome particular part, have their denomination

tion from the part affected, and are known by the names of *Ophthalmy*, *Quinſey*, *Inflamed Breaſt*, *Parotis*, *Bubo*, and *Hernia Humoralis*, according as the inflammation happens to ſeize the *eye*, the *throat*, the *breaſt*, the *parotid*, the *axillary* or *inguinal* glands, or the *teſticles*.

Phlegmon.

When an inflammation is circumſcribed, and deeply ſeated in the veſſels of ſome fleſhy part, the term for the diſeaſe is *Phlegmon*; a word that the old writers applied to inflammations in general, but which at preſent is only uſed in oppoſition to Eryſipelas, when the redneſs is more extended, and but ſuperficial.

A phlegmon therefore may always be known by the circumſcribed ſwelling and hardneſs, from the deep red colour, and from the great pain and tenſion, together with pulſation or throbbing.

Where a phlegmon is not critical, but proceeds from ſome external cauſe, we are always to endeavour to procure a reſolution; and for this purpoſe, muſt bleed largely and repeatedly, according to the circumſtances of age, ſex, and conſtitution; and at the ſame time give the cooling purges which have been formerly mentioned. In aid of theſe internal remedies, we muſt alſo make uſe of fomentations and cataplaſms, in order to facilitate the diſſipation of one part of the impacted humours, and the abſorption of the remainder. The fotus communis of the London Diſpenſatory is what the ſurgeons generally uſe on theſe occaſi-

ons,

ons, and this will be rendered more powerful by adding to every gallon of the decoction an ounce of crude ſal ammoniac, half a pint of vinegar, and as much common ardent ſpirit. The ſtupes ſhould never be applied with more heat than gives an agreeable ſenſation; and after having ſufficiently fomented the part, let it be covered as far as the inflammation extends, with a poultice made of the lees of claret, thickened to the proper conſiſtence with bran; or with a cataplaſm of bean-meal and ſimple oxymel, ſoftened with a ſufficient quantity of oil of roſes. When by theſe means the inflammation is diſperſed, then, in order to ſtrengthen the part, and brace up the veſſels, it will be proper, after a few days, inſtead of the cataplaſms, to apply cloths dipt in equal parts of ſimple lime-water, vinegar, and camphorated ſpirit of wine.

But if, in ſpite of our endeavours to carry off the inflammation by reſolution, it ſhould nevertheleſs continue, and the heat, redneſs, pain, and ſwelling increaſe daily, then we may expect an abſceſs; and in order to forward the ſuppuration, muſt change the diſcutient fotus for one of an emollient quality, (ſuch as milk, in which the leaves of mallows, and ſome bruiſed linſeed, have been boiled) and apply bread and milk poultices, ſoftened with ung. ex althæa, inſtead of the bran with lees of claret, or the bean-meal cataplaſm.

By a continuance of theſe applications, (or if the ſimple bread and milk poultice ſhall not be deemed ſufficiently emplaſtic and heating, we may add to it ſome linſeed-meal, and white lily-root,

root, or apply the cataplaſma maturans ph. Lond.) a kindly ſuppuration will generally be found to ſucceed; and when the abſceſs is formed, it uſually will point in ſome favourable place for opening. The manner of opening the abſceſs muſt depend on the particular circumſtances of the caſe, with regard to ſituation, and magnitude of the ſwelling: in very large abſceſſes, it is beſt to cut out an oval piece of the teguments, ſo as not to leave any looſe flabby edges, but in thoſe of moderate ſize it will generally be ſufficient to make only a ſimple inciſion.

The firſt dreſſings may conſiſt ſolely of dry lint; but in a few days, if the ſore ſhould not appear to be growing clean, the doſſils muſt be armed with ſomewhat of a detergent quality; red precipitate, mixed with black or yellow baſilicon, or the green baſilicon alone are what the ſurgeons uſually apply, in order to cleanſe away the ſloughs that frequently fill the bottom of the ſore; when theſe caſt off, and the red granulated fleſh begins to ſprout up, then the dry dreſſings muſt be applied again; and theſe, with the proper aſſiſtance of bandages, are all that Nature generally requires to complete the cicatrization.

In ſome habits we ſhall find ſuch ſharpneſs of the juices, that there will be a neceſſity for giving the cortex, in order to bring on a kindly ſuppuration, and facilitate the healing of the ſore after the opening of the abſceſs: and we ſhall know the caſes that require the cortex, by obſerving the thin and acrid ſtate of the diſcharge, while there is uſually more or leſs of a hectic fever attending: when-

whenever we find things in this ſtate, we muſt not delay, but immediately begin, and give the medicine in ſuch form and doſe as the particular circumſtances of the caſe may require.

In other caſes, mercurials and decoctions of the ſweetening woods are required, in order to correct the ſharpneſs of the diſcharge.

Eryſipelas.

In the *eryſipelas*, the ſwelling is not circumſcribed, the redneſs is not ſo deep as in the phlegmon, but bright and ſhining; and when the inflamed part is preſſed with the finger, the ſpot remains white for a few moments, but grows red again after the preſſure is removed; circumſtances which all ſhew the ſeat of the inflammation to be in the ſubcutaneous veſſels: but very often the phlegmon and eryſipelas are ſo blended, that the old writers uſed to beſtow compound epithets on the inflammation, calling it *Phlegmon Eryſipelatodes* when the phlegmon was thought moſt predominant, and *Eryſipelas Phlegmonodes* when the eryſipelas appeared to prevail.

The treatment of an eryſipelas, when the conſequence of an eruptive fever, having been already laid down, we have only to conſider it as a ſimple inflammation, ſucceeding ſome external injury.

As the true ſimple eryſipelas never ends in an abſceſs, but either goes off by reſolution or exudation, the topical remedies muſt always be ſuch as ſhall

ſhall favour the expulſion of the impacted fluids through the pores of the ſkin; hence in theſe inflammations, we are never to apply things which are of a greaſy and emplaſtic nature. Goulard's extract, diluted with the requiſite proportion of water; or, in ſome caſes, a decoction of linſeed and white poppy heads, with elder and camomile flowers, and a due proportion of the linimentum ſaponaceum, will make a proper fomentation as long as the ſkin keeps whole; but when angry pimples, or little bliſters ariſe, then the ung. tripharmacum ph. Lond. ſpread on ſoft linen will be the moſt eligible application.

The ancients had great ſcruples with reſpect to bleeding in the eryſipelas, as they judged the inflammation, in this caſe, to be owing to a bilious humour; whereas the phlegmon was thought to ariſe from a fluxion of pure blood: and theſe ſcruples have been copied even by modern ſyſtematic writers, though without much reaſon; for bleeding and cooling purges are as often required in the eryſipelas as the phlegmon, always proportioned however to the particular circumſtances of the patient, and exigencies of the caſe.

Boil.

The *furunculus*, or *boil*, is an inflamed ſwelling, more circumſcribed and pointed than even the phlegmon, very hard and painful, ariſing indifferently in all parts of the body. As boils are ſeldom capable of being diſcuſſed, the only thing left is to promote ſuppuration, by maturating cataplaſms,

or

or in ſome caſes by plaſters compoſed of equal parts, emplaſtrum è mucilaginibus, & commune cum gummi; and when the ſuppuration ſhall be complete, to make an opening ſufficient for diſcharging the matter; which in this caſe is not altogether fluid, like the pus of an abſceſs, but conſiſts chiefly in firm ſloughs, that form a core, which muſt caſt out entirely before the ſore will heal up.

In conſtitutions where boils break out frequently, or in ſuch abundance as to diſtreſs the patient, there will often be a neceſſity for mercurials and decoctions of the ſweetening woods to correct the depraved ſtate of the fluids.

Carbuncle.

The *anthrax*, or *carbuncle*, is more livid, but not ſo painful as the common boil, never ſuppurates kindly, but bliſters, mortifies, and yields a ſharp ichor, and black ſloughs inſtead of mild pus and the yellow core. The appearance of carbuncles always argues the preſence of the moſt cauſtic and deleterious kind of acrimony, and ſhould conſtantly warn us to expect the worſt.

Thoſe which appear in the plague have been already mentioned; but it ſometimes happens, that carbuncles are ſporadic, and ſhall break out when there is no peſtilential fever epidemic.

On the neck, and about the ſhoulders, are the places where theſe ſwellings moſt commonly appear; if the patient be ſick, languid, feeble, and oppreſſed, with a weak ſlow pulſe, and is conſtantly doſing,

doſing, we may pronounce death to be near at hand. Emollient applications are preferable to thoſe which are acrid, but it muſt be confeſſed that theſe are caſes wherein neither internals nor externals are found to avail; and the principal uſe of deſcribing the carbuncle is, that it may not be miſtaken for a common boil, and conſequently be looked on as an affair of no great hazard or danger.

CHAP. III.

Of the Ophthalmia, or Inflammation of the Eye.

WE might diſtinguiſh ſeveral varieties of the *ophthalmia*, but the principal thing to be conſidered is the degree of inflammation, whether it be ſlight, when only the veſſels of the tunica adnata and ſclerotica are affected; violent, wherein there is much pain and the inflammation ſpreads to the eye-lids; or moſt violent, when the internal veſſels of the eye are the ſeat of the inflammation, which, in theſe caſes, is accompanied with a high fever, intolerable pain and delirium. We are alſo to conſider whether the diſorder has been brought on by any external injury; whether it ſprings from ſome internal ſharpneſs of the juices; or whether from ſome fault in the atmoſphere, which diſpoſes to this particular diſeaſe.

The ſlighter degrees of ophthalmy may often be cured without bleeding, or other evacuation, merely by the uſe of external remedies. But when the

the inflammation is conſiderable, and attended with great pain and a degree of fever, then we muſt have recourſe to the cooling purges and antiphlogiſtic regimen. The greater degrees of inflammation are not to be cured without large and repeated bleedings, not only from the uſual places where veins are opened, but alſo by applying leeches to the upper part of the cheek, or to the temple near the external angle of the eye. And, beſide theſe local bleedings in obſtinate caſes, it will be of ſervice to bliſter behind the ears, or back of the head, or to apply cupping-glaſſes with ſcarification.

The topical applications muſt be varied according to the circumſtances of the caſe.

It was formerly ſhewn, that an inflammation is the effect of two conjunct cauſes; namely, exceſs of oſcillatory motion, and want of ſufficient reſiſtance in the coats of the veſſels: in ſome caſes of ophthalmy, we may plainly obſerve the predominant cauſe to be intenſeneſs of motion; and when we find it ſo, (which may be inferred from the great heat, dryneſs, and very ſevere pain) then we ſhall obtain relief by bathing the eye with a weak ſolution of ſacch. ſaturni, or Goulard's Eau vegeto-minerale; and afterwards laying on a poultice, incloſed within the folds of a ſoft cambrick handkerchief, made by thickening either of theſe with crumbs of bread.

On the other hand, when we find, from the flabby ſtate of the inflamed veſſels, moiſture of the eye, and moderate degrees of heat and pain, that the predominant cauſe is relaxation, we muſt have recourſe to aſtringent eye-waters, and the application

cation of alum-curd. The following ſimple eye-water, will be found a moſt efficacious one, in all caſes of inflamed eyes that are thus circumſtanced.

℞. Sal. marini (vulgo dicti *bay ſalt*) dr. ij. vitrioli alb. dr. j. aq. fluviatilis pur. lib. ij. coque, lenem ſuper ignem, vaſe fictili vitreato, ad medias, ſpumam ſubinde averrens: poſtquam refrixerit, coletur per chartam, aqua opthalmica.

Where the veſſels are greatly relaxed, we often find the cortex of much ſervice, and in ſome caſes it is uſual with ſurgeons to cut away part of the flabby diſtended veſſels, which are chiefly the veins ſpread over the white of the eye; the cure will ſeldom be perfected without the bark in ſcrofulous habits, and, in theſe ſubjects, the edges of the eye-lids being ſwelled and ulcerated, frequently require ſome manual operation to evacuate the acrid humour, by laying open the ſinuſes that run along from ulcer to ulcer. And, beſide the common ophthalmic applications, we muſt have recourſe to liniments. * It is uſual alſo with ſurgeons to touch gently theſe ulcerated eye-lids with lapis infernalis, and afterwards apply ſoftening digeſtive liniments; but this, like cutting the veſſels, requires a nice hand, and much caution. In all caſes of inveterate ophthalmy, we are carefully to inſpect the eye, to ſee whether the inflammation is not kept up

* Such as the ung. tutiæ; or the following, recommended by Sir John Pringle: ℞. Ung. alb. dr. quinque, ſacch. ſaturni ſcrupulum, inter terendum, adde balſ. traumat. ſcrup. duos.

up by the eye-laſhes turning inwards; this is a cauſe that is often overlooked, and conſtitutes that variety of the diſeaſe, termed Ophthalmia Trichiaſis, but when known, is eaſily removed by plucking out the inverted hairs.

When the inflammation does not immediately give way to bleeding, purging, and proper external applications, we are obliged to bliſter the back of the head, or behind the ears, and keep up the diſcharge for ſome weeks; or, in more obſtinate caſes, to make iſſues in the arms, or put a ſeton in the neck; or, which has been found to anſwer ſtill better, to pierce the lobes of the ears, and excite a diſcharge from the punctures, by conſtantly keeping little ſkeins of ſilk in the openings, in the manner of a ſeton.

Inflammations of the eye, like thoſe of other parts, ſometimes terminate in a ſuppuration.

When the ſeat of the diſeaſe has been internal, and matter formed within the globe of the eye, the ſight is irreparably loſt, as the purulent matter muſt deſtroy the tranſparency of the humours: and even when the inflammation has been but ſuperficial, yet, if abſceſſes be formed on the tranſparent part of the cornea, they generally leave cicatrices behind them, which, thickening the coat, obſtruct the paſſage of the rays of light, and ſo produce different degrees of blindneſs.

CHAP.

CHAP. IV.

Deſcriptions and Methods of Treatment of the different Varieties of Cynanche, or Inflammation of the Throat.—Parotis.—Bubo.—Hernia Humoralis.

THE *cynanche*, *quinſey*, or *inflammation of the throat*, is a common diſeaſe, and frequently epidemic; when ſporadic, it uſually attacks perſons, who, after having been over-heated, imprudently expoſe themſelves to the cold air, or ride againſt a ſharp drying wind.

1. The *cynanche tonſillaris*, is the moſt common variety of this diſeaſe, wherein the inflammation ſeizeth the tonſils, with the uvula and velum palati; for the moſt part only one is affected at firſt, from whence it ſpreads acroſs the velum to the oppoſite tonſil. While the inflammation is confined to one ſide, the patient can ſwallow tolerably, though with conſiderable pain; but when both tonſils are affected, then deglutition becomes extremely difficult, and the pain grows almoſt intolerable, ſometimes ſo great as to bring on convulſions in delicate habits.

It is not unuſual in this diſeaſe to ſee the patients able to ſwallow ſolids with leſs difficulty than liquids, becauſe the ſwallowing of liquids requires the action of more of the muſcular faſciculi, ſubſervient to deglutition, than that of ſolids; the ſpittle, on account of its viſcidity, being more diffi-

cult to ſwallow than even the liquids uſed for drink, the patient ſuffers it to accumulate in the fauces, and hence the continual hawking, which increaſes the ſoreneſs of the parts affected, and prevents ſleep.

The neck is ſometimes puffed up, and this is reckoned not an unfavourable circumſtance, as it ſhews leſs danger of ſuffocation; and there is in general a pain ſtriking to the internal ear, from the inflammation's ſpreading to the aperture of the Euſtachian tube.

By degrees the inflammation either goes off, or a ſuppuration enſues, and an abſceſs is formed in one or both tonſils, for it rarely happens that the parts mortify.

If the inflammation ſpreads downwards among the muſcles of the larynx, ſo as to render the opening of the glottis difficult, the diſeaſe becomes extremely dangerous, on account of the ſuffocation which threatens the patient: equally alarming is the caſe, when the morbific matter appears to be tranſlated to the brain, producing a violent head-ach, and high delirium: or to the lungs, creating oppreſſion of the cheſt and difficulty of breathing: but if the matter of the diſeaſe ſhifts from the internal to the external parts, which we know from the ſkin of the neck becoming red and painful, it always relieves the patient. And it is in order to encourage this tranſlation, that in bad caſes we are obliged to lay a bliſter acroſs the throat. In leſs alarming ones we content ourſelves with applying a piece of flannel moiſtened in linimentum volatile

volatile all round the throat, and up behind the ears.

The true inflammatory quinſey is a diſeaſe wherein there is a neceſſity for large and repeated bleedings, and for briſk ſaline purges. The topical applications conſiſt of thoſe already mentioned, and of gargles, which, in caſes of violent inflammation, are better thrown into the fauces with a ſyringe, than left to the patient's own management; as the motion of the inflamed parts, which the frequent gargling requires, is apt to increaſe the complaint.

Sage-tea, with a little vinegar, makes a good gargle in the beginning, while we have hopes of preventing a ſuppuration: receiving the ſteams of this, or of the infuſion of elder and camomile flowers in equal parts of water and vinegar, is of ſervice, and will ſometimes give great relief, as it favours the exudation and diſſipation of the impacted fluids; but when the force of the inflammation is abated, and we want ſomewhat to ſtrengthen and brace up the relaxed fibres, then the gargles muſt be made more aſtringent, and muſt conſiſt of tincture of roſes, or of claret and water, with a little allum and honey.

If the evacuations, and other means intended for procuring a reſolution ſucceed, the fever, head-ach, heat in the throat, and pain in ſwallowing, begin to abate from the third, fourth, or fifth day; and in three or four days more the patient is generally quite well, or perhaps only continues to

feel ſome ſlight degree of pain in ſwallowing, but without fever.

But if the inflammation ſhould not ſubſide within the firſt four or five days, we may reſt aſſured that it will run on to a ſuppuration: and we ſhall know that an abſceſs is forming, from obſerving that the febrile ſymptoms continue, though abated in violence, while the pulſe grows ſofter, the redneſs of the inflamed parts leſs florid, and the pain more eaſy to bear, the patient, from time to time, being affected with ſlight ſhiverings.

When we find things tending this way, the ſuppuration ought to be encouraged, and for that purpoſe we are to apply maturating poultices to the outſide of the throat, and frequently waſh the inſide by injecting a decoction of figs, or infuſion of linſeed, taking care to inſpect the fauces daily, in order to ſee if the abſceſs appears, which it generally does in five or ſix days.

Theſe abſceſſes frequently burſt of themſelves; but when they are ſo ſituated as to be within view, and we ſee a whitiſh tumour, and feel the fluctuation with the end of the finger, it will ſave the patient a good deal of uneaſineſs, if we immediately open the abſceſs, and direct detergent gargles, made of barley-water, honey of roſes, a little vinegar, and tincture of myrrh.

It ſometimes happens, that the matter is collected ſo low down in the fauces as to be out of the reach of an inſtrument. In that caſe, we are obliged to wait with patience for the ſpontaneous burſting of the abſceſs, and in the mean time do what we

we can to ſupport the patient by broth-gliſters, if ſwallowing be impracticable; and by bliſtering, or ſtimulating cataplaſms to the throat, endeavour to ſolicit the morbific matter toward the external parts. Though many of theſe laſt-mentioned caſes are alarming and tedious, yet it ſeldom happens that the patient dies after a ſuppuration is formed.

The diſeaſe, as hitherto deſcribed, is ſuppoſed to take place in robuſt conſtitutions, and the inflammation to be owing more to intenſeneſs of the oſcillatory motion, than to want of reſiſtance on the part of the veſſels; but when the contrary happens, which we may conclude from the oppoſite temperament of the patient, and by obſerving the inferior degrees of heat, pain, and redneſs, we are in this caſe to be more ſparing of the lancet, and depend chiefly on purging, and the application of bliſters; and the gargles in theſe pituitous ſore-throats are to be ſharpened with horſe-radiſh root, or muſtard-ſeed, in order to ſtimulate, and attenuate the viſcid mucus which clogs the folliculi of the tonſils, and other glandular bodies about the fauces.

In theſe cold conſtitutions, the inflamed tonſils are not ſo apt to ſuppurate, as in people of a more robuſt frame; but when ſuppurations happen, they are to be managed according to the directions already given; and when the parts ſhall be ſufficiently deterged by proper gargles, we muſt order ſtrengtheners and aſtringents, not only as topical remedies, but alſo give the cortex and chalybeates internally,

internally, to reſtore firmneſs to the conſtitution in general.

2. A ſecond variety is the *cynanche trachealis*. When the inflammation particularly ſeizes the muſcles of the larynx, or membranes lining the upper part of the trachea, the breathing is rendered extremely painful and difficult, the voice becomes ſhrill and rattling, the internal heat and pain intolerably diſtreſſing, but no great appearance of inflammation is ſeen in the fauces, nor any remarkable external ſwelling: theſe caſes are ſeldom capable of relief, the progreſs of the diſeaſe being ſo extremely rapid.

If the inflammation ſhould not immediately appear to give way to the uſual and moſt active antiphlogiſtic remedies, and there is evident danger of ſuffocation, the operation of bronchotomy might be tried, in order to give ſome chance for ſaving the patient's life.

3. *Suffocatio ſtridula*; vulgò, the *croup*: this is nearly allied to the foregoing; and from the particular deſcription given by Dr. Home, appears to be an inflammation of the membrane lining the upper part of the trachea, which is found, on diſſection to be covered over, and the paſſage for air almoſt filled up with a thick ſlough, having a fibrous and membrane-like appearance, being the viſcid remains of humour thrown off from the inflamed parts, by exudation.

The progreſs of this diſeaſe, which is epidemic at certain times, and ſeizes only children, is ſo exceedingly

ceedingly quick, that there ſeems to be little or no opportunity of attempting much for the relief of the patient.

Inſtant bliſtering acroſs the throat would perhaps be the moſt likely means of doing ſervice; a peculiar ſhrilneſs of the voice, like the crowing of a cock, with a cough, but no ſickneſs, nor at firſt much difficulty of breathing, are the diſtinguiſhing ſigns of the croup. *

4. *Cynanche Pharyngea.* Wherein the inflammation particularly ſeizes the muſcles of the pharynx and upper part of the œſophagus, thereby rendering it impoſſible to ſwallow, while the breathing remains tolerably free.

The ulcerous and malignant ſore-throats, which are frequently epidemic, and, moſtly like the croup, ſeize young ſubjects, do not ſo properly belong to inflammations, as they do to putrid fevers, and therefore have been already mentioned along with thoſe ſpecies of fever that moſt commonly attend them; namely, the *remittens anginoſa maligna*, *ſcarlatina maligna*, and *febris aphthoſa*.

5. *Cynanche maxillaris*; vulgò, the *mumps*: this diſeaſe is often epidemic; the inflammation ſpreads from the parotid and maxillary glands, and affecting the muſcles and ligaments, which raiſe up and connect the lower with the upper jaw, occaſions ſevere pain on opening the mouth. Though the ſwelling is uſually large, yet there is ſeldom any remarkable

* For the particular hiſtory, ſee Dr. Home's Eſſay on the Croup.

remarkable degree of fever attending: bleeding once or twice; a ſmart ſaline purge or two; and the application of flannel, with the linimentum volatile, are generally ſufficient to remove the complaints.

In ſome inſtances it has been obſerved, that when the inflammation in the face ſubſides, a ſwelling of the teſticles ſucceeds.

There might be other varieties of quinſey mentioned, but theſe ſeem ſufficient, for practice; for the remainder, the reader will conſult Sauvages, and Dr. Cullen's ſynopſis.

Inflammations of the *parotid* glands are moſtly critical, and the conſequence of a fever; therefore we are never, in theſe circumſtances, to think of any thing but forwarding the ſuppuration, and then, having opened the abſceſs, treat it according to art.

Buboes alſo, when ſupervening a fever, muſt always be brought forward if poſſible; but when they happen in conſequence of the venereal infection, it is often a much better and ſafer practice (as will be ſhewn in the proper place) to reſolve, than bring them to ſuppuration.

An *inflammation* of one or both *teſticles*, is a frequent conſequence of the venereal infection as well as of bruiſes, and other external injuries; and there is alſo a fever, (called by Morton, Febris Teſticularis) which, like the mumps, depoſits the morbific matter on the teſtes.

As

As long as there is any reaſonable proſpect of reſolving the inflammation, we are to purſue the antiphlogiſtic remedies, both internal and external, and try by every poſſible means to prevent a ſuppuration from taking place; but when matter does form, in ſpite of all that can be done, it muſt be diſcharged without loſs of time by a ſufficient opening, in order to prevent the teſticle from being irreparably injured by ſoaking in a purulent fluid.

CHAP. V.

Internal Inflammations; Deſcriptions and Methods of Treatment of the Phrenitis and Otitis.

BY *internal inflammations* are meant thoſe which ſeize the different parts that line, or fill up the three great cavities, cranium, thorax, and abdomen.

We ſhall begin with the *phrenitis*, or inflammation of the membranes inveſting the brain.

The diſtinguiſhing ſigns of this diſeaſe are, a moſt violent and furious delirium, an excruciating pain of the head, and redneſs of the eyes, with a quick, hard, and generally ſmall pulſe.

We are not to confound the delirium, which is a common ſymptom in many fevers, with the original inflammation of the meninges, which will readily

dily be diſtinguiſhed by obſerving, that in the phrenitis the delirium is evident, and violent, before there be any remarkable degree of fever; whereas, in the common febrile delirium, the diſeaſe is always of ſome days continuance before the delirium is obſervable, and the degree of raving is correſpondent to the degree of fever: but in the true phrenſy the degree of fever is never correſpondent to the delirious fury, which is equal to what we meet with in real madneſs, from which the inflammation of the meninges is hardly to be diſtinguiſhed but by the ſhortneſs of its duration; for it muſt terminate, either in recovery or death, in the ſpace of a very few days.

The original or true phrenſy is not a common diſeaſe in theſe temperate climates; but in the hot countries, where people are often expoſed to the ſun, and incautious of defending the head from the ſcorching heat, the veſſels in that part are frequently ſo weakened and irritated, that they give way to the force of the fluids, and become the ſeat of an inflammation, which very ſeldom admits of a favourable criſis, as one may readily conceive, from conſidering the delicacy of the affected veſſels, and their importance in the animal œconomy.

In ſuch an alarming caſe, our endeavours to procure a reſolution muſt be proportionally active; therefore, bleeding ad deliquium, adminiſtering ſmart purges, bathing the lower extremities in warm water, ſhaving the head, and waſhing it with cold vinegar, or pouring cold water on it, or even applying ice to it, are to be put in practice without

without delay; at the ſame time, giving large and frequently repeated doſes of nitre. This proceeding is with a view to divert the flow of blood from the head, while we endeavour to allay the intenſeneſs of motion, and ſtrengthen the veſſels in that particular part.

If relief cannot be obtained by theſe means within the firſt four days, we ſhall ſoon ſee the patient become ſtupid and ſleepy, and convulſions ſucceeding, will preſently terminate in death.

When things take a favourable turn, whether it be in conſequence of the method purſued, or from a plentiful bleeding at the noſe, which ſometimes happens, and we find the raging delirium ſubſide early, before the veſſels have ſuffered much injury, the patient will recover in a few days, and have no other complaint but weakneſs and giddineſs of the head, which wear off gradually; but if relief ſhould not come early, even though the patient does ſurvive, for the moſt part, the ſenſes never perfectly return, and a degree of idiotiſm remains.

Sauvages, by dividing inflammations into *membranaceæ* and *parenchymatoſæ*, was here under the neceſſity of making two diſtinct genera, *phrenitis* and *cephalitis*; and he ſplits theſe into no leſs than twenty-four ſpecies; intending, by the firſt, thoſe caſes wherein only the meninges are inflamed; and, by the ſecond, thoſe wherein the ſubſtance of the brain and cerebellum become the ſeat of the diſeaſe. Theſe diſtinctions, with reſpect to practice, are totally ſuperfluous, as being only different

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ent ſtages of the ſame diſeaſe; for the phrenitis, before the patient dies, will generally run on till it becomes a cephalitis.

Otitis.

The *otitis*, or *inflammation of the internal ear*, is accompanied with the moſt excruciating pain, which frequently riſes to ſuch a pitch as to render the patient highly delirious.

In this caſe, we muſt endeavour by every means to divert the flow of blood from the affected part, as well as to abate the intenſeneſs of motion, by general evacuations, and the antiphlogiſtic diet and medicines: hence large and repeated bleedings; cooling and ſmart purges; cupping with ſcarification, and applying leeches and bliſters to the back part of the head and behind the ears; bathing the legs in warm water, are all to be put in practice in their turns, to try, if poſſible, to terminate the diſeaſe by a reſolution; but if, in ſpite of all our efforts, it ſhould run to a ſuppuration, and the patient ſurvive till the abſceſs burſts, and the purulent matter begins to diſcharge itſelf from the meatus auditorius, we are then to throw in detergent injections, compoſed of barley-water, honey of roſes, and tincture of myrrh, in order to cleanſe the ulcer, and facilitate the diſcharge of the matter.

CHAP.

CHAP. VI.

Inflammations of the Parts which line and fill up the Thorax. Carditis. Pleuriſy. Peripneumony. Paraphrenitis.

THE membranes which line and divide the cheſt are extremely liable to become the ſeat of an inflammation, as well as the lungs, which fill up the greateſt ſhare of this cavity: The heart alſo, and pericardium, are not exempt, as appears from the inſpection of dead bodies. *

The name of this diſeaſe is *Carditis*, which muſt always prove mortal, unleſs the degree of inflammation be exceedingly ſlight indeed; but the ſigns are ſo dubious and equivocal, that it will always be confounded with the pleuriſy, or peripneumony.

Some authors hold it ſuperfluous to diſtinguiſh the pleuriſy from the peripneumony, becauſe diſſections

* Even the coats of the blood-veſſels themſelves, eſpecially the veins, are liable to be inflamed; and from ſome obſervations, lately made by the celebrated Mr. John Hunter, it appears that the dangerous inflammations which ſometimes enſue after the common operation of bleeding, and which hitherto, have always been conſidered as ariſing from the puncture of either the nerve, or tendinous aponeuroſis, do in fact, originate from the vein itſelf. Or, poſſibly the miſchief may, ſometimes, be brought on, by wounding ſome branch of the valvular lymphatics; for Mr. Hunter has ſhewn very ſatisfactorily, that we cannot with juſtice, aſcribe it to an injury of the nerves, or tendons, ſince theſe may be cut, punctured, or lacerated, in other parts, without bringing on inflammation.

ſections have ſhewn, in hundreds of inſtances, that the pleura is never affected alone, the inflammation always ſpreading to the lungs; this, however, only ſhews, that before death the lungs are always engaged, but does not by any means prove, that in thoſe who recover from the diſeaſe, the pleura may not have been inflamed ſingly; therefore, in laying down hiſtories of diſeaſes, it ſeems right to preſerve the diſtinction, and to call that a *Pleuriſy*, where there is a high fever and hard pulſe, accompanied with a moſt acute pain or ſtitch, increaſing always upon inſpiration, ſomewhere in the cheſt, moſt commonly the right-ſide, under the fleſhy part of the breaſt, together with a teazing dry cough, and difficulty of breathing; and term that a *peripneumony*, wherein the cough is moiſt, the pain not ſo acute or ſuperficial, nor the pulſe ſo full and hard, though the difficulty of breathing, and anxiety or oppreſſive weight, be rather more diſtreſſing. But with reſpect to practice, diſtinctions are not of much importance, ſince the methods of treatment depend more on obſerving the ſtage of the diſeaſe, than in knowing the preciſe ſeat of the inflammation; for theſe reaſons, we ſhall firſt give a combined deſcription of the riſe and progreſs, and then lay down the general method of treatment, without conſidering the pleuriſy as diſtinct from the peripneumony.

From obſervations made for upwards of forty years, it appears, that theſe diſeaſes are moſt frequent in the Britiſh Iſlands in ſpring, next to that, in winter, and are but ſeldom ſeen in ſummer or autumn: they appear moſtly after a continuance of cold, dry, and windy weather; and uſually ſeize people of ſtrong and full habits, who, nevertheleſs

vertheleſs, are apt to contract coughs on every trifling occaſion.

The attack generally begins with violent ſhivering, which is ſoon ſucceeded by conſiderable heat, with a cough, and remarkable ſenſe of weight, and tightneſs of the cheſt, together with a pain in the head, and ſometimes retching to vomit; the ſtitch does not commence from the very firſt attack, generally not for ſome hours afterwards, and ſometimes it is not felt till the ſecond or third day.

The pulſe in general is remarkably hard, except in very bad caſes, when the inflammation is deeply ſeated, and ſeizing on the ſubſtance of the lungs, occupies a large proportion of this viſcus: here the pulſe is ſmall, ſoft, and ſlow, becauſe of the difficulty that the blood meets with in its paſſage through the branches of the pulmonary artery, which are compreſſed by the quantity of tranſuded fluids in the air-veſſels, and in the cellular interſtices of the lungs; and hence alſo the extreme anguiſh, inceſſant agitation, and toſſing; the patient by conſtant change of poſture, trying, if poſſible, to obtain ſome freedom in breathing.

When the inflammation is leſs violent, and not ſo much extended, then we find the pulſe quick, pretty ſtrong, and moderately full, the pain confined to one ſide, and ſuch as may be endured; but ſtill there is a ſtraitneſs of the cheſt, and ſenſe of weight or oppreſſion; and theſe ſymptoms never go off entirely until the freedom of the circulation be perfectly reſtored.

This freedom is reſtored, either by art, deriving the flow of blood from the inflamed veſſels, which

which ſoon recover their tone when the load is removed from them; or by a natural criſis.

The method of treatment in this ſpecies of inflammation depends, as it does in all others, on the particular time that we happen to be called in.

If applied to at the firſt ſeizure, we are to order immediate bleeding from a large orifice, and take away as much blood as the patient's age, ſex, and conſtitution will bear; young and robuſt ſubjects ought to loſe at leaſt 14 or 16 ounces; the patient is then to be well ſupplied with pectoral decoction, almond-milk, or infuſion of the roots of gramen caninum, and ordered to ſip them gradually; ſo that the warm vapour may enter along with the air in breathing, which will tend to relax and ſet free the pores that open into the pulmonary veſicles from the inflamed arteries; and thus the exudation will be favoured, and the expectoration ſooner brought on, which will unload and relieve the diſtended blood-veſſels; applying a large ſponge, dipt in warm vinegar, to the mouth and noſtrils, will alſo be of uſe in promoting the exudation.

When the diſorder is but ſlight, and taken in time, the firſt bleeding generally gives eaſe for ſome hours; but then, the complaints of pain and oppreſſion return, and therefore, to obviate their violence, we muſt repeat the bleeding, and take away 10 or 12 ounces more.

Theſe evacuations will pretty often be found ſufficient; as, in conſequence of this ſudden derivation, the inflamed veſſels being eaſed of their load,

load, will ſoon recover their ſtrength, and the circulation go on as it ought to do.

But if, at the end of ten or twelve hours from the ſecond bleeding, the ſymptoms ſhould return with additional violence, then we muſt take away more blood, and apply a bliſter to the ſpot where the pain is felt; more eſpecially if the pain be ſevere, and the inflammation appears to ſpread outwardly.

Some phyſicians have immediate recourſe to ſmart purges, in order to favour the reſolution, and allege, that this practice is followed with greater ſucceſs than when we wait for the natural criſis by expectoration; but ſuch as are afraid of diſturbing Nature, and adhere to the old maxim of not attempting to carry off matters before they are concocted, content themſelves with ordering nitre, joined to ſmall doſes of emetic tartar, together with ſoftening linctuſes to eaſe the cough. They ſometimes alſo direct the radix ſeneka, which has obtained reputation in theſe caſes, and give it in decoction, according to a formula in the Edinburgh Diſpenſatory. This root is ſaid to be a powerful attenuant, and to have remarkably good effects in promoting and keeping up the expectoration, which, when once begun, is to be the great object of our attention: when at any time it begins to flag, we muſt endeavour to promote it, by mixing lac ammoniaci and oxymel of ſquills, with the pectoral decoction, an ounce of each to a quart, and order three or four ſpoonfuls to be taken every third or fourth hour.

In this, as in moſt other caſes of inflammation, the blood that is drawn is uſually covered with a whitiſh ſcum, generally termed the Pleuritic Cruſt, from its being ſo often met with in this diſeaſe: it is held as a favourable appearance when this cruſt is obſerved to become leſs thick and leſs tough at every ſucceſſive bleeding, and hence ſome authors adviſe to repeat the bleedings until the cruſt ſhall diſappear.

With regard to the leſſening of the cruſt, (the nature of which was formerly explained, *) theſe inferences are generally true, provided the patients feel themſelves ſenſibly better at the ſame time; but whoever ſhall truſt wholly to the appearances of the blood, muſt often be deceived, as there are inflammations where the cruſt is never ſeen; but on the contrary, the blood is found in the broken and diſſolved ſtate, and the patients bear bleeding as ill as they do in the putrid fevers, formerly deſcribed.

As long as the violence of the ſymptoms continues to increaſe, we are to go on with the bleedings to the fourth or fifth time, according to the ſtrength of the patient.

But if on the fourth or fifth day we find the diſeaſe begin to take a favourable turn, and that towards evening the patient is not ſo bad as on the night before, the cough leſs ſevere, expectoration free, and the matter thus thrown off leſs tinged with blood; the reſpiration eaſier, head leſs affected,

* In the Semeiology, Chap. VI.

affected, and tongue not quite ſo dry; then we are not to repeat the bleedings, but go on with the diluents and mild expectorants; and if the belly be not ſufficiently open, order an emollient clyſter to be thrown up.

If the expectoration continues copious and free, every hour brings relief, and in a few days, things return to the natural ſtate; but if it ſhould ſtop ſuddenly, and not be ſucceeded by any other diſcharge, then the caſe becomes extremely hazardous, and we muſt try to avert the danger by bleeding, if the pulſe will bear it; by directing warm ſteams to be drawn in with the breath; by applying bliſters, and giving antimonials in ſuch doſes as ſhall bring on gentle vomiting, in order if poſſible to renew the expectoration, and draw off ſome part of the load from the pulmonary veſſels, which, unleſs ſpeedily relieved, will ſoon become incapable of tranſmitting the blood, and conſequently a fatal ſuffocation enſue.

If the inflammation has ſpread to the ſubſtance of the lungs, and a reſolution has not been effected early, the diſeaſe cannot be expected to terminate favourably in any other way than by a copious and free expectoration; but if it has not ſo ſpread, and only the pleura and intercoſtal muſcles have been inflamed, then a plentiful ſweat, or a large flow of loaded urine, will often be found to carry off the diſeaſe.

When the criſis has been complete, the pain and oppreſſion ſoon wear off, the cough gradually ceaſes, and the patient by degrees recovers his former ſtate of health.

But in cafes where the patients have not been fufficiently blooded, or not early enough; or where they have been too much funk by exceffive bleeding, fo that the critical difcharges have been hindered from being fufficiently made; or when thefe difcharges have been confufed or interrupted by fome error or mifmanagement; then the veffels which were the feat of the inflammation do not recover their tone, and the fluids which tranfude into the cellular fubftance remain accumulated in the cells, where they preffently melt down the folid lamellæ, and turn into pus.

This purulent matter is fometimes collected in a cavity between the pleura and intercoftal mufcles; fometimes it forms a cyft for itfelf in the fubftance of the lungs; at other times the matter is diffufed through the cellular interftices of the lungs; and fometimes it exudes from their furface, and is poured out and collected in the cavity of the thorax at large, in all thefe cafes leaving the patient in a moft perilous fituation.

There is but very little chance for a recovery except in thofe cafes where the matter is collected in a cyft, or diftinct cavity.

The term for an abfcefs here is *Vomica*, and it fometimes happens, that this fhall remain a conſiderable while before it burfts; and in fome cafes where there happens to be but little preffure on any of the larger trunks of the pulmonary veffels, and the cyft is of a compact texture, thefe abfceffes will occafion no great diftrefs, nor much hectic fever; for, if there be little or no abforption, we fhall

ſhall have little or no hectic fever; but whenever the vomica breaks, and the purulent matter is taken up by the abſorbents, and carried into the circulation, then the patient will be ſeized with alternate cold and hot fits, which will bring on profuſe ſweats, and in the end deſtroy life, unleſs it ſhould ſo happen, that the purulent matter ſhall be diſcharged by expectoration.

We may know that a vomica is formed, if, after fourteen days, the ſymptoms, though abated in violence, ſhall ſtill appear far from being removed; the cough, difficulty of breathing, and oppreſſion continuing, though the pain has ceaſed; the pulſe ſtill quick, though weaker and ſofter; and if, joined to theſe, the patient ſhall feel a ſlight ſhivering, and this be ſucceeded by heat, we may be certain that a ſuppuration has taken place: and when we find theſe ſymptoms grow every day more and more diſtreſſing, that the cough is exaſperated upon the leaſt motion, and the patient can only lie on the affected ſide, or perhaps cannot lie down at all, while weakneſs and waſting are daily more evident, then we may be aſſured that there is a formed collection of matter, from which the patient will have little or no proſpect of eſcaping, unleſs the abſceſs ſhould happen to burſt into the branches of the trachea, in ſuch a gradual manner as not to occaſion ſuffocation, but allow the purulent matter to be coughed up, and expectorated by degrees.

Theſe circumſtances will give riſe to the two varieties of phthiſis, which were referred to this place;

place; namely, the *phthiſis à peripneumonia*, and the *phthiſis à vomica*.

It is ſufficiently obvious, that while things are in the ſituation here deſcribed, we ought to truſt pretty much to Nature, although ſome of the writers recommend the uſe of gently ſtimulating and relaxing vapours, to be conveyed along with the air into the lungs, in order to ſoften the parts, and favour the burſting of the abſceſs, or the total ſeparation and expulſion of the cyſt, with its contained matter, which has ſometimes been known to happen; it has alſo been propoſed to ſet the patients on horſeback, or jolt them in a carriage, or to give emetics; the event, however, of all theſe expedients muſt be very uncertain, ſince they may chance to occaſion ſuch a ſudden burſting of the abſceſs as will bring on immediate ſuffocation. If the vomica happens to break in the favourable way, and the expectoration goes on freely, every day bringing relief from the cough and difficulty of breathing, then we may begin to entertain ſome hope of a recovery, more eſpecially if the matter which is expectorated appears of the kindly ſort, whitiſh, ſmooth, and free from fætor; and in order to favour the healing and cleanſing of the ulcer, the patient muſt be put on a courſe of the leaſt heating balſamics; with a proper dietetic courſe, as already mentioned when treating of the Phthiſis. Conveying balſamic ſteams into the lungs has alſo been recommended, as hath likewiſe the vapour from a chemical noſtrum, which appears to be the ſp. vitrioli dulcis, dropt into warm water. Ground-ivy tea, ſweetened with balſamic

ſamic ſyrup, will make a proper drink, which may be taken ad libitum; in like manner may an infuſion of the leaves of chervil; or this herb may be bruiſed, and the juice mixed with whey, and taken liberally; or it may be boiled up and made into broth, with the addition of ſome of the lighter kinds of animal food.

Sauvages having laid himſelf under the neceſſity of making diſtinct genera of the pleuritis and peripneumonia, has ſubdivided them into no leſs than thirty-two ſpecies; twenty of the pleuriſy, and twelve of the peripneumony.

Though theſe minute diſtinctions are extremely ſatisfactory, conſidered as hiſtories of diſeaſes, and the induſtry and accuracy of the compiler greatly to be admired and commended, yet there are but few of them that require to be attended to in forming the indications of cure.

The varieties which depend on the difference of place where the pain or ſtitch is felt, and which may incline us to determine the preciſe ſeat of the inflammation, and to name the diſeaſe accordingly, *pleuritis dorſalis*, *mediaſtini*, vel *pericardii*, are not worthy of notice.

The chief thing to be regarded is, whether the diſeaſe be truly and ſimply inflammatory, or complicated with a putrid, eruptive, or ſome other epidemic fever; we are therefore to remember, that a *ſimple pleuriſy* is known by the hard tenſe pulſe; by the ſharp ſtitch, neither remitting nor increaſing upon preſſure, fixed among the true ribs,

ribs, not low down among the falſe; by the dry cough, attended with ſuch an increaſe of pain, that the patients ſuppreſs it as much as poſſible, being afraid to cough; and from the blood which is drawn being covered with a thick buff.

The *ſimple peripneumony*, which takes place in ſubjects whoſe blood is in a ſound ſtate, is known by the continued fever, intenſe heat, redneſs of the face, ſmall, ſoft, and quick pulſe, ſometimes unequal; by the ſtuff expectorated, at firſt bloody, at leaſt tinged red, becoming whitiſh or yellowiſh, and viſcid, in the progreſs of the diſeaſe; there is no great nauſea, the tongue not remarkably foul, nor the breath fetid; blood, like the pleuritic, with the thick whitiſh cruſt.

But when theſe inflammations take place in conſtitutions where the craſis of the blood has been previouſly injured by a putrefactive acrimony, or when they are complicated with fevers occaſioned by infectious miaſmata, ſuch as have been formerly deſcribed, then the ſymptoms of extreme weakneſs and dejection, ſickneſs, vomiting, petechiæ, and delirium, will be found ſuperadded to the pain in the cheſt, cough, oppreſſion, and difficulty of breathing.

Theſe complicated pleuriſies and peripneumonies are conſtantly mortal, as the extreme weakneſs and dejection hinder the large and repeated bleedings, which are the only things capable of removing the inflammation.

In priſons, hoſpitals, or tranſport-ſhips, where infectious putrid fevers prevail, it is not uncommon

mon to meet with theſe malignant peripneumonies, as the reader will ſee in Huxham's Eſſay on Fevers.

They have alſo been found to rage epidemically in certain ſeaſons, in different countries of Europe; and appear to be occaſioned by a moſt corroſive ſpecies of acrimony ſettling on the lungs, which in a ſhort time produces a gangrene, not conquerable by either Art or Nature.

The reader is referred to Sauvages, who has brought together the hiſtories of theſe epidemics, which have been recorded by different writers.

Paraphrenitis.

We may conclude that an inflammation has ſeized the diaphragm, from the ſeat of the pain, and from its vaſt increaſe upon every motion of this muſcle in breathing or coughing, together with a prodigious ſtraitneſs or tightening of the cheſt, as if it were bound round with a cord.

The paraphrenitis, or inflammation of the diaphragm, is ſaid by moſt writers to be accompanied with a raging delirium like the phrenitis; ſome, however, deny this, and aſſert that a ſimple inflammation of the diaphragm is not neceſſarily attended with delirium, any more than the ſimple pleuriſy or peripneumony, and Lieutaud is for dropping the diſtinction, as being a needleſs multiplication of terms.

The diſpute is of no conſequence with regard to practice, ſince nothing more can be attempted for the relief of an inflammation of the diaphragm, than

than what has been already recommended for the pleuriſy or peripneumony.

When the convex part of the liver, where it is connected with the diaphragm, is ſeized with an inflammation, this will readily be communicated to the parts in the thorax, and will occaſion ſuch a cough and difficulty of breathing, as ſhall make the caſe appear to be an original inflammation of the lungs.

CHAP. VII.

Inflammations of the different abdominal Viſcera.—Deſcriptions and Methods of Treatment.

THE different ſpecies of inflammation of the parts contained in the abdomen, are,

1. The *hepatitis*, or inflammation of the *liver*.
2. *Splenitis*, of the *ſpleen*.
3. *Epiploitis*, of the *omentum*.
4. *Gaſtritis*, of the *ſtomach*.
5. *Enteritis*, of the *inteſtines*.
6. *Meſenteritis*, of the *meſentery*.
7. *Nephritis*, of the *kidneys*.
8. *Cyſtitis*, of the *urinary bladder*. And,
9. *Hyſteritis*, of the *uterus*.

Hepatitis.

Hepatitis.

The liver is not only liable to become the ſeat of an original inflammation, but is likewiſe apt to ſuffer from tranſlations of matter, when at any time its veſſels are rendered weak; and this happens often in the courſe of violent fevers. It has alſo been obſerved, that an abſceſs of the liver has ſucceeded a fracture of the ſcull; owing, as is ſuppoſed, to the diſturbance raiſed in the biliary ſecretion from the injury done to the nervous ſyſtem, which we may infer is much diſturbed, from the vomiting that conſtantly follows ſevere blows on the head.

The original inflammation of the liver, termed *Hepatitis*, is rather an uncommon caſe, but may be known by the following ſigns:

If the ſuperior and convex part of the liver be the place where the inflammation has chiefly ſettled, the pain will be very acute, eſpecially while the diaphragm is in motion; and it will be found to ſhoot up along the mediaſtinum towards the throat and clavicle, attended with a dry cough, vomiting, and loſs of ſtrength, a quick pulſe, and great increaſe of pain when the patient attempts to lie on the left ſide, together with a remarkable tenſion of the hypochondrium, and ſoreneſs to the touch on the right ſide.

If the inferior and concave part of the liver be the ſeat of the inflammation, the patient can turn with more eaſe, the pain will not be ſo very ſevere, nor will it increaſe with the motions of the diaphragm;

phragm ; but there will be great ſickneſs and vomiting, vaſt oppreſſion and tenſion of the hypochondrium, and a yellowiſh caſt in the colour of the ſkin.

When we happen to be called in at the commencement, we muſt attempt to reſolve the inflammation by the means already propoſed in other caſes ; only here, from the particular diſpoſition of the blood-veſſels, and peculiar texture of the liver, we are not to expect ſuch immediate relief from large and repeated bleedings, as we ſometimes meet with in other inflammations : bliſtering on the place where the pain is felt, together with the frequent injection of watery clyſters, ſtuping the belly, bathing the legs, and the ſaline mixtures, with a little emetic tartar, and as much tincture of rhubarb as will keep the bowels open, are more to be depended on than bleeding.

If theſe means do not anſwer in procuring a reſolution, an abſceſs will enſue; or the remains of the inflammation will ſettle in an indolent ſwelling, generally ending in jaundice or dropſy.

An abſceſs of the liver either burſts into the cavity of the abdomen at large, in which caſe death muſt inevitably enſue, as the ſharp purulent matter will corrode the ſurfaces of the other viſcera ; or it puſhes outwardly, and occaſions a ſwelling that ſometimes points ſo as to be favourable for opening.

If it ſhould happen that the liver, where it was inflamed, adheres all round to the peritonæum, ſo as to form a bag for the matter, and hinder it from falling

falling into the cavity of the abdomen, then, opening the abſceſs by a ſufficiently large inciſion, will probably ſave the patient's life; but if the adheſion to the peritonæum be imperfect, the matter will fall down between it and the liver into the cavity at large, and the caſe will be as deſperate as that which has been juſt now mentioned.

Sometimes the matter of an hepatic abſceſs comes away in the urine, and ſometimes it is diſcharged by ſtool. When the matter comes off in the urine, we may conclude that it has been taken up by the branches of the vena cava, which are diſtributed through the liver, and thus carried back into the circulation, from whence it is ſeparated by the kidneys. But when the pus comes off by ſtool, it muſt either have burſt into the biliary ducts, and ſo have been carried by the ductus communis into the duodenum; or the abſceſs having been formed in the concave part of the liver, where it lies contiguous to the colon, muſt have adhered to this inteſtine, and burſt into its cavity, from whence the matter will be diſcharged by ſtool, in a ſudden and large flow, to the great and immediate relief of the patient.

After the abſceſs is formed, the diſeaſe changes its name, and becomes a *tabes hepatica.*

Dr. Heberden in his paper on diſeaſes of the liver, formerly recommended to the peruſal of the reader, obſerves, that nothing tends ſo much to produce obſtructions in this viſcus, and conſequent inflammations, as the intemperate uſe of ſpirituous liquors; and though Bath waters are in no caſes more

more uſeful, than in remedying many of the injuries done to the conſtitution by drunkenneſs; yet in caſes of the tabes hepatica, they aggravate all the febrile ſymptoms, and haſten the patient's death. The proper water in theſe, as in moſt other hectic caſes, is the Seltzer; and goat's whey promiſes to be particularly uſeful.

Splenitis.

If the ſpleen becomes the ſeat of an inflammation, the diſeaſe will be termed *Splenitis*. A fixed dull pain, foreneſs to the touch, with a ſenſe of weight and tenſion in the left hypochondrium, together with an obſcure fever that generally remits, may be held as diſtinguiſhing ſigns of this diſeaſe.

As an original diſeaſe, the ſplenitis is exceedingly rare; but the ſpleen is frequently loaded in conſequence of certain fevers, particularly the remittent, and often remains for a great length of time in the ſchirrous or indolent ſtate.

Sometimes a ſuppuration takes place in this viſcus, and that without much previous diſtreſs, or evident diſorder, until, burſting all at once, the purulent matter is let looſe among the abdominal viſcera, and in a few days puts an end to the patient's life.

A middle-aged man, ſeemingly in health, was ſeized ſuddenly with an entire ſtoppage of urine, and at the end of three days died. When opened, the viſcera of the abdomen were all found drenched in purulent matter, which had come from the ſpleen, whoſe ſubſtance was entirely waſted; and neither

neither ſtone or gravel were found in any of the urinary paſſages. The extreme ſharpneſs of the matter acting on the exterior ſurface of the bladder, had made it contract itſelf into a very ſmall compaſs.

Epiploitis.

The omentum has been known to become the ſeat of an inflammation; this, if it can be diſtinguiſhed, muſt be by the ſharp pain in the upper and forepart of the abdomen, with ſwelling, tenſion and foreneſs to the touch, accompanied with the general ſymptoms of inflammation.

The epiploitis is a very uncommon diſeaſe; but when it does happen, bliſtering the epigaſtric region, joined to the other means already mentioned, ſhould ſeem the moſt rational ſcheme for preventing a ſuppuration; if that ſhould once take place, there can be no hope.

It has been already mentioned that in moſt of the ſubjects who were opened after the puerperal fever, the omentum was found diſſolved by ſuppuration; and hence ſome of the writers on this diſeaſe have conſidered it as a pure inflammation.

Gaſtritis.

The ſigns of the *gaſtritis* are, moſt acute pain, always increaſed upon ſwallowing even the milder kinds of drink; tenſion at the pit of the ſtomach; inexpreſſible anxiety; great internal heat, like burning; conſtant retching, and frequent hiccup; the pulſe ſmall, quick, and intermitting.

The

The treatment will depend much on knowing the true ſource of the diſeaſe, which will conſtitute ſo many different varieties.

1. *Gaſtritis exanthematica.* The repulſion of acrid matters, or ſudden ſtriking in of febrile eruptions, have ſometimes been obſerved to excite an inflammation of the ſtomach; and, the caſe will ſpeedily prove mortal, if theſe cannot be recalled to the ſurface of the body by the immediate application of bliſters. In ſubjects who have died in theſe circumſtances, the ſtomach has been found mortified in different parts.

2. *Gaſtritis à veneno.* If poiſon has been ſwallowed, we muſt in the firſt place endeavour to find out of what kind it has been; and, if not too late, by the exhibition of an emetic, empty the ſtomach completely of the noxious matters, and then fill the whole track of the alimentary canal with ſheathing liquids. The drinking a large quantity of new milk, or freſh butter melted, has been known to preſerve life in caſes where arſenic has happened to be the poiſonous ſubſtance taken.

The antidote for corroſive ſublimate, is to drink largely of a ſolution of any mild fixed alcaline ſalt; (we muſt take care, however, that it be perfectly mild;) about an ounce of the ſalt to a gallon of water, will be a juſt proportion; if an inflammation has not already taken place, this may poſſibly prevent it, by decompounding the ſublimate; as the marine acid of that compoſition will quit the mercury to join with the alcali, and thus the corroſive quality be deſtroyed.

3. *Gaſtri-*

3. *Gaſtritis traumatica.* In the gaſtritis from wounds, the management muſt be formed on the general antiphlogiſtic ſcheme; repeated bleedings, frequent clyſters, ſtuping the epigaſtric region, and ſoftening emulſions.

When a real inflammation (no matter from what ſource) once takes place in ſuch a ſenſible part as the ſtomach, there muſt be very little chance of the patient's eſcaping; for, unleſs it can be reſolved in the very beginning, the caſe almoſt conſtantly ends in a mortification; there being ſcarcely any room for ſuppuration, the part affected not having enough of the looſe cellular texture, to admit that way of termination.

Enteritis.

The ſame thing may be ſaid of the *enteritis*; for though there is nothing more common than to hear people talk of inflammations of the inteſtines, and of theſe inflammations being cured, yet, ſuch hiſtories may be juſtly doubted; what paſs for inflammations here, are, for the moſt part, ſome of the varieties of colic, which perhaps have no mixture of inflammation.

A tenſion of the belly, and ſwelling, with great internal pain, and ſuch an external ſoreneſs about the umbilical region as can ſcarcely bear the touch, accompanied with thirſt and heat, great weakneſs, and a quick but ſmall pulſe, may ſerve to aſſure us that the inteſtines are in a ſtate of inflammation.

The ſources of this inflammation, being various, render it neceſſary to diſtinguiſh the varieties.

1. *Enteritis dyſenterica.* In the more violent caſes of dyſentery, the inteſtines are apt to inflame, being irritated by the great ſharpneſs of the humours, continually running through them, and the ſcene is generally cloſed by a mortification.

2. *Enteritis hernioſa.* Ruptures are a frequent ſource of inflammation in the inteſtines; for which reaſon, when called in to any of theſe caſes, we are always to be very accurate in our inquiries concerning this matter; ſo that the rupture, if any be found, may be properly taken care of, and, if poſſible, the inteſtine returned to its natural ſituation; if not remedied in time, a vomiting of excrementitious matters will ſupervene, and produce the *enteritis iliaca*, or iliac-paſſion.

A complete ſtoppage of the inteſtines from any other cauſe will be followed by an inflammation, and all its neceſſary conſequences; therefore, in theſe caſes, our moſt active endeavours are to be uſed to procure a free paſſage through the bowels; but the methods for anſwering this purpoſe ſhall be particularly laid down when we come to treat of the different ſpecies of colic.

3. *Enteritis à veneno.* When poiſons, or the like cauſtic ſubſtances, have been ſwallowed, and paſs on to the inteſtines, we are to manage according to what has been already mentioned with reſpect

ſpect to the gaſtritis, which proceeds from theſe ſources.

If the means uſed to reſolve the inflammation, let it proceed from what cauſe ſoever, do not ſucceed in the courſe of a very few hours, a gangrene will enſue, and ſoon carry off the patient. People who die of a mortification in the inteſtines, feel no diſtreſs for ten or twelve hours before death, as the pain ceaſes entirely by that time, and they ſink away, perfectly in their ſenſes to the laſt minute: the ſinking of the pulſe, the pale ghaſtly look, and the cold clammy ſweats, all teach us to foretell the fatal event, which the patients themſelves are ſeldom aware of, but, from the ceaſing of the pain, are apt to conclude themſelves in a way of recovery.

Meſenteritis.

The meſentery, and the glands diſperſed through it, are often the ſeat of an inflammation, particularly in ſcrofulous habits, which frequently end in abſceſſes, and give riſe to a tabes, as ſupplying a ſource of purulent matter, which is taken up by both kinds of abſorbents; but it muſt be next to impoſſible to diſtinguiſh preciſely when either an inflammation or a ſuppuration hath taken place in the meſentery, or glands belonging to it, the parts affected being ſo deeply ſeated, and not endued with much ſenſibility.

Nephritis.

The *nephritis* will be known from the acute pain and heat in the region of the kidneys, ſmall quan-

tity of high-coloured urine, nauſea, retching to vomit, retraction of one of the teſtes, and a numbneſs of the leg and thigh, joined to the common febrile ſymptoms that attend all other inflammations. It is diſtinguiſhed from the lumbago by the vomiting, retraction of the teſticle, and numbneſs; and by the patient's being able to raiſe himſelf up without exciting ſevere pain.

The ſtone or gravel is the moſt frequent ſource of the nephritis. In theſe caſes the pain is greatly increaſed by the patient's being jolted in a carriage or on horſe-back, the urine is often bloody, gravelly, and mixed with mucus. The remedies are, bleeding, nitroſe medicines, warm bathing, ſoftening emulſions, oily draughts, emollient clyſters, and opiates, all with a view to relax the fibres, and allow the bits of gravel or ſtone to deſcend along the ureter, and get into the bladder; for then, the pain, and other ſymptoms will ceaſe, at leaſt for a time. (See further under the article *Nephralgia.)*

Theſe calculous caſes do not require ſuch plentiful bleeding as that variety of the nephritis which ſprings from hard riding, a ſtrain, or ſome other external injury; for this demands large and repeated bleedings, together with the quieting, relaxing, and cooling remedies already mentioned.

A ſuppuration often takes place in the kidneys; and we may conclude this to be the caſe, when notwithſtanding the abatement of the pain, we ſtill find the patient complain of a ſenſe of weight in the loins, while at the ſame time there are frequent ſhiverings ſucceeded by hot fits, and the urine, inſtead

inſtead of being red and without ſediment, becomes whitiſh and turbid.

As the purulent matter in theſe caſes is ſpeedily waſhed off, and carried away by the urine, it is not ſo liable to be abſorbed; and hence it is, that people have been known to labour for many years under an ulcer of the kidneys, without being much affected by a hectic fever. Goat's whey, or thoſe mineral waters which are impregnated with the foſſile alcali, together with balſams that do not heat, ſuch as the capivi, or balſamum canadenſe, are the courſes from whence we are to expect relief.

Cyſtitis.

An *inflammation of the bladder* is diſtinguiſhed by the great pain and tenſion in the region of the pubis, a difficulty or total ſtoppage in making urine, accompanied with a frequent needing or teneſmus, and the other general ſymptoms of heat, thirſt, &c. This is brought on either by ſharp ſtones irritating the coats of the bladder, by taking cantharides, or frequent introduction of the catheter.

The ſcheme of treatment here is the very ſame with that which is to be purſued in the nephritis, therefore need not be repeated.

The *hyſteritis* muſt be reſerved for the third claſs.

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METHODICAL INTRODUCTION

TO THE

PRACTICE

OF THE

ART OF MEDICINE.

BOOK III.

FLUXES.

CHAP. I.

General Indications for the Cure of Fluxes.

IN the cure of fluxes, as well as in that of inflammations, there are certain general indications, regardleſs of the particular ſpecies.

It was formerly ſhewn, that morbid diſcharges depend on two conjunct cauſes, and that ſometimes one of theſe ſhall predominate, and ſometimes the other.

Whenever we find, from the full and frequent pulſe, and from the concurrent ſymptoms of exceſſive

ſive heat and pain, that the predominant cauſe of a flux is increaſe of circulating force, our chief endeavour ſhould be to abate this intenſeneſs of motion.

But before we uſe any very active remedies, we are always to conſider whether the flux may not have a ſalutary tendency, either in relieving from too great fulneſs, or in diſcharging ſome offenſive matter, which, by its ſtay, might create a more diſtreſſing and dangerous diſeaſe.

By obſerving how the patient bears the diſcharge, and by informing ourſelves of the antecedent cauſes, we ſhall generally be enabled to form a judgment, when it is proper to interpoſe, and when it will be ſafer to leave things entirely to Nature.

When it is proper to interpoſe, and the plain indications are to leſſen the force of the circulation, we have recourſe to nearly the ſame method of treatment, as was laid down for the general management of inflammations, when we want to procure a reſolution; but as all active fluxes are brought on, and kept up by irritation, we ſhould particularly endeavour to diſcharge the acrid matter, by emetics, or cathartics, if practicable; (as is often the caſe in alvine fluxes;) correct it by the means of proper alteratives, when we cannot ſo diſlodge it; or, render the living ſolids leſs ſuſceptible of the impreſſion of the acrimony, by the uſe of opiates.

In

In all fluxes accompanied with ſpaſmodic conſtriction, which we may always know from the dryneſs of the ſkin, thirſt, oppreſſion, ſickneſs, and ſmall quantity of urine, we can never hope to conquer the diſeaſe until the circulation throughout the whole circumference of the vaſcular ſyſtem ſhall be rendered equable and free; and therefore, in theſe caſes the moſt effectual remedies are ſmall doſes of the emetic medicines; theſe, as hath been already ſhewn, when given, ſo as to raiſe only nauſea or gentle vomiting, poſſeſs a remarkable power of relaxing the cutaneous pores; and hence it is, that ipecacoan and the vitrum antimonii ceratum have obtained ſuch credit in the cure of dyſenteries, and in many caſes of hæmorrhage.

Theſe are the general indications, when we are perſuaded that the flux, of whatever ſpecies it be, depends more upon increaſe of momentum in the fluids, than on weakneſs or deſtruction of texture in the ſolids.

But when the laſt mentioned cauſe is the one that predominates, and the flux is of that ſort termed Paſſive, then our practice muſt be reverſed; and we are to aim at ſtrengthening, bracing up and conſtringing the weak and relaxed fibres and ſphincters; or endeavour to repair the waſte, and agglutinate the ſolids, when theſe are eroded, or their texture divided.

For theſe purpoſes we muſt have recourſe to nouriſhing diet, with the temperate uſe of wine and moderate exerciſe, aided by analeptic medicines, and thoſe of the auſtere aſtringent kind;

or

or to the different balſams and the cold bath, ſeverally adapted to the particular circumſtances of the caſe.

CHAP. II.

Different Species of Alvine Fluxes diſtinguiſhed. Deſcription, and Method of Treatment, of the Cholera.

SO much for the general ſcheme of treatment. Let us now proceed to diſtinguiſh the different ſpecies of morbid diſcharge, and point out their ſeveral methods of cure.

Fluxes are divided into three genera; the firſt of which is the *alvine flux*.

The whole alimentary canal is endowed with ſuch exquiſite ſenſibility, that the application of every kind of matter, which would injure health by remaining in the body, is ſoon felt, and efforts made for expelling it either upwards or downwards; hence the diſcharges, in conſequence of this extraordinary action of the ſtomach and inteſtines, are never to be held as diſeaſes, but when they are either ſo violent, or of ſuch long continuance, as to produce notable degrees of pain, ſickneſs, weakneſs, or ſome other diſtreſſing ſymptom.

When the caſe is ſo circumſtanced as to oblige us to conſider the diſcharge as morbid, we are to take our meaſures according to the ſpecies of the diſeaſe.

Alvine

Alvine fluxes are diſtinguiſhable into the following ſpecies:

1. *Cholera*; which is a moſt violent vomiting and purging, accompanied with great ſickneſs, griping, weakneſs, and very often cramps in the lower extremities.

2. *Dyſenteria*; wherein there is a ſevere purging of feculent and ſlimey ſtuff, oftentimes mixed with blood, but always attended with griping, nauſea, teneſmus, and different degrees of fever.

3. *Diarrhœa*; which is a frequent purging, but without violent degrees of pain or ſickneſs.

4. *Lienteria*, or ſlipperineſs of the inteſtines; a frequent purging of liquid matters, mixed with the alimentary ſubſtances, which appear to have ſuffered but little change from the digeſtive organs.

5. *Cœliaca*, or white flux; a frequent purging of whitiſh fluid, ſuppoſed to conſiſt chiefly of chyle.

6. *Hepatirrhœa*, or hepatic flux; a frequent purging of bloody ſerum, ſuppoſed to be derived from the liver, without violent pain, great ſickneſs, or ſudden loſs of ſtrength.

7. *Melæna*, or black flux; a frequent purging of blackiſh humour, without putrid fœtor, ſudden weakneſs, or notable degrees of pain and nauſea.

The

The four laſt mentioned ſpecies are but rarely met with, but the firſt three are common diſeaſes, and therefore require to be particularly conſidered.

Cholera.

The *cholera* is a diſeaſe that oftner occurs in autumn than any other quarter of the year, more eſpecially if a very hot and dry ſummer has preceded: it makes its attack ſuddenly, the patient being ſeized all at once with violent vomiting and purging, which are generally aſcribed to ſomewhat taken in the laſt meal, ſuppoſed to diſagree with the ſtomach. The diſcharges both ways are various in their appearance; yellow, green, brown, and ſometimes almoſt black.

A moſt ſevere griping, and heavy ſickneſs, always attend, the pulſe at firſt is full, ſtrong, and quick, but ſoon ſinks, and the patient becomes extremely weak and dejected.

In very violent degrees of the cholera, it is not uncommon for the ſick perſons to purge near a hundred times in the compaſs of five or ſix hours, and, in this ſhort ſpace, to be ſo reduced, and the countenance ſo entirely changed, that their intimate friends can ſcarcely know them. In theſe caſes, it is alſo uſual to ſee them ſeized with cramps in the limbs, ſucceeded by a hiccup and general convulſions, with cold ſweats and frequent ſwooning. When the diſeaſe proves fatal, the patient either goes off in one of the fainting fits, or expires in convulſions.

We

We are to diſtinguiſh the true ſpontaneous cholera from the vomiting and purging which enſue from a ſurfeit, or from having ſwallowed any thing of a poiſonous quality.

In the diſeaſe now under conſideration, our firſt endeavours muſt be to dilute, obtund, and waſh off the acrid matters, by large and frequently repeated draughts of thin broth, made of chicken, beef, or mutton, well cleared from fat; if broth cannot be readily got, milk and warm water, new-churned butter-milk, decoction of rice or barley; or, which is preferable to all theſe, an infuſion of toaſted oaten bread, or oat-meal made brown like coffee, and brewed in the ſame manner. This makes a very palatable drink, and will generally be found to lie on the ſtomach.

If the patient be of a full habit, the pulſe ſtrong and hard, we muſt bleed inſtantly, and ſhall ſometimes find that this alone will ſtop the vomiting.

If the pains in the ſtomach and belly be very ſevere, a ſemicupium, or ſtuping the belly with flannels wrung out of a warm ſpirituous fomentation, will be apt to give eaſe.

If the vomiting ſhould continue after the ſtomach appears to be completely waſhed by the repeated affuſion of mild and ſheathing drinks, we muſt try the antiemetic draughts of ſal abſinthii and ſuccus limonum; or ten grains of the powder of columbo root, in a ſpoonful of cinnamon or nutmeg-water; apply cataplaſms to the wriſts and pit of the ſtomach, of mithridate, or of the leaves

of

of common mint boiled in claret, and give for drink mint-tea, or a light infuſion of cloves or cinnamon.

For the moſt part, after ten or twelve hours, the ſtomach ſettles, and the purging begins to abate; then it will be proper to give an opiate, in order to allay the remaining diſturbance in both nervous and vaſcular ſyſtems: the tinctura thebaica, in ſome grateful and well-adapted vehicle; or, if liquids do not agree, the extractum thebaicum in a proper doſe.

The reſt procured by opiates uſually removes all complaints, excepting the nauſea and weakneſs.

On the ſecond day, if there be no return of the vomiting or purging, there will be no neceſſity for any thing pharmaceutical, excepting the opiate; but, on the third or fourth day, it will be proper to give a doſe of rhubarb, and after its operation, an agreeable paregoric draught.

After this, the patient may gradually return to the uſual courſe of diet, and recruit the ſtrength by proper nouriſhment, aided by riding.

If the appetite be ſlow in returning, ten or twelve drops of elixir vitrioli acidum, taken in the forenoon in ſome light bitter infuſion, will be found of great ſervice.

The cholera is ſometimes connected with the intermittent fevers that prevail in autumn; and has been obſerved to predominate ſo far above the febrile

brile ſymptoms as to deſerve the appellation of *cholera intermittens*.

The cure in theſe caſes is accompliſhed by large doſes of the cortex, given during the intervals of the fits of vomiting and purging.

Violent vomiting and purging ſometimes ariſe from worms, and conſtitute the *cholera verminoſa*.

The repulſion of arthritic matter has alſo been followed by like ſymptoms, and when this caſe happens, death can ſcarcely fail to enſue. The famous Sydenham was carried off in this manner: (ſo ſays Sauvages, though it does not appear on what authority; as this circumſtance is not mentioned in the life prefixed to Sydenham's works by his tranſlator, Dr. Swan, nor in that which is written by Dr. Birch.)

CHAP. III.

Deſcription, and Method of Treatment of the Dyſentery.

THE *dyſentery* is a frequent diſeaſe, and was formerly conſidered as endemic in Ireland; but during the courſe of the preſent century, it does not appear to have been more common in this kingdom than in Great Britain. In all marſhy countries, the dyſentery is apt to enſue after hot and dry ſummers; as, in ſuch ſituations, and during ſuch weather, great ſtore of putrid vapours is raiſed

raiſed from the earth, and ſuſpended in the higher parts of the atmoſphere while the heat continues, but when the cold evenings of autumn come on, the miaſmata fall down, and are productive of many diſeaſes.

The dyſentery is alſo apt to become epidemic after ſeaſons wherein the fruits of the earth have been ſpoiled, or not duly ripened, and when people have been obliged to make uſe of bread made of damaged corn or bad flour, or to feed on half-rotten fleſh or fiſh; and it often ariſes, like the malignant fevers formerly deſcribed, in cloſe dirty places, where there are great numbers of people crouded together.

That variety of the dyſentery which proceeds from an acrimony of the highly putrefactive kind, and which is termed *Dyſenteria Putrida*, is extremely fatal and very infectious.

The attack begins with a general coldneſs, that laſts for ſome hours, during which, great weakneſs, ſickneſs, and a giddineſs of the head come on; the patient turns pale, and feels many ſharp pains in the belly before the flux begins, the pulſe all this while being ſmall, and little, if at all, feveriſh. The firſt ſtools are often thin and yellowiſh, but in a ſhort time become viſcid, ſlimey, and generally tinged with blood. If the blood comes in ſtreaks, we conclude that it proceeds from openings of the ſmall veſſels at the end of the rectum, while a more intimate mixture may aſſure us that it flows from a higher ſource. This hæmorrhage, which is apt to alarm the moſt, is the ſymptom leaſt to be dreaded,

dreaded, as the quantity of blood that is loſt is but inconſiderable; ſince there is ſeldom any eroſion of the veſſels, but only a dilatation of their pores, and open extremities.

The ſtools are all along diſtinguiſhed by a peculiar ſmell, different from what is common and natural; this, though always offenſive, is not ſo extremely bad at firſt, but toward the end of the diſeaſe, and in caſes that turn out mortal, the fœtor is cadaverous and intolerable.

The pains increaſe before each of the diſcharges, which grow very frequent, ten, twelve, or fifteen in an hour perhaps, accompanied with a perpetual teneſmus, forcing down the rectum, which often mortifies, and haſtens on the fate of the unhappy patient; who otherwiſe might linger till an inflammation takes place, which will ſoon run on to a gangrene, and that will put an end to the miſery.

This is a deſcription of the moſt violent degree of dyſentery, ariſing from an acrimony that is highly putrefactive; but where the humours are not ſo far corrupted, the degrees of weakneſs, nauſea, and dejection, are not ſo great, the ſtools not ſo numerous, nor attended with ſuch ſevere pain.

The other variety of dyſentery, is allied to the inflammatory fever; and termed *Inflammatoria*, as being accompanied with great heat and thirſt, and violent pain in the head and loins, as well as the abdomen, the pulſe quick, hard, and full.

In general it is proper to begin the cure of the dyſentery by taking away ſome blood, but more eſpecially in ſuch caſes as are attended with inflammatory ſymptoms; but unleſs the fever be kept up by ſome inflammation not peculiar to the diſeaſe, repeated bleeding is not only unneceſſary but hurtful; and in weakly habits, or where the conſtitution of the diſeaſe is truly putrefactive, ought to be wholly omitted.

After the bleeding, for adults of a robuſt frame we may order twelve grains of ipecacoan, and three of emetic tartar, to be divided into three equal parts, and direct one to be taken immediately, without drinking any thing after it; the ſecond in two hours more; and the third in two hours after that; and then allow the patients to drink freely of weak beef or chicken-broth, to encourage the operation; after which a paregoric will be neceſſary.

On the next day, if the medicine has not wrought much downwards, it will be proper to give a bolus of a ſcruple or twenty-five grains of rhubarb, with two or three grains of calomel; but if the operation of the ipecacoan and emetic tartar happens to be pretty ſmart, and the patient ſeems fatigued, it will be beſt not to order any thing the ſecond day, except in the evening, when it will be proper to give one grain of opium, and three or four of ipecacoan made into a bolus. An opiate is alſo to be given at the cloſe of the ſecond day, if the patient ſhall have taken the rhubarb and calomel.

If

If by theſe means the ſharp matter appears to be tolerably well cleared off, and the pain, ſickneſs, and thirſt ceaſe to be diſtreſſing, there will be no occaſion to give any medicine whatever on the third day; but, ſhould the griping and purging continue, we muſt now begin with the ipecacoan in ſmall doſes, of a grain or two every third or fourth hour, according to the patient's age or conſtitution.

Whenever this medicine brings on ſuch degrees of naufea as threaten vomiting, we muſt deſiſt till the ſtomach ſettles, and then begin again. In the evenings a paregoric is always requiſite; and if the ſtools be remarkably ſlimey and offenſive, we muſt every ſecond or third day give a doſe of rhubarb, with a grain or two of calomel: thus we are to go on, intermixing opiates and the ipecacoan in ſmall doſes, until the circulation ſhall become equable and free, and the flow of acrid humours be diverted from the inteſtines; which will be known from the quiet equable pulſe, and from the ceſſation of the griping and teneſmus, as well as from the appearance of the ſtools; which, though looſe and frequent, will now be found of a more natural ſmell and colour, and leſs mixed with ſlime.

But if, notwithſtanding all our attention, the diſeaſe ſhall be found not to abate of its violence, and the ſtools continue as frequent, as ſlimey, and accompanied with as ſevere griping and teneſmus as at firſt, we may juſtly apprehend a fatal termination; though we muſt ſtill perſiſt in our endeavours to procure relief, by fomenting the belly,

and throwing up anodyne clyſters made of milk, broth, or decoction of linſeed, with a due proportion of ſtarch, and from twenty to thirty drops of tinctura thebaica.

When a dyſentery is complicated with a malignant putrid fever, a recovery can hardly be expected; but we are to try an infuſion of bark and ſnake-root in claret, with a few drops of tinctura thebaica in each doſe; and here, if they can be had, allow the patients to eat plentifully of ripe grapes, currants, cherries, or any other ſort of ſubacid fruit that ſhall happen to be in ſeaſon, and ſqueeze the juices of theſe fruits into the drink: for, notwithſtanding a vulgar prejudice, that fruits are hurtful in the dyſentery, or that they even cauſe the diſeaſe, attentive obſervation has ſhewn this notion not to be founded in truth.

Dr. Tiſſot always made it a rule, in thoſe ſeaſons when dyſenteries were moſt frequent, to eat little fleſh-meat, but much fruit; and he affirms that he has never had the ſlighteſt attack of the diſeaſe; and that other phyſicians of his acquaintance, who uſe the like precautions, are equally free from the infection.

He alſo relates, that he ſaw eleven patients in one houſe in the dyſentery, nine of whom were tractable, eat fruit, and recovered. The grandmother, and one child, whom ſhe loved particularly, and whom ſhe managed after her own faſhion, with burnt wine, oil, and ſpices, but no fruit, both died.

Tiſſot

Tiſſot moreover informs us, that in the year 1751, when a putrid dyſentery made terrible havock in Switzerland, he knew a family near Berne, conſiſting of eleven perſons, ten of whom eat plentifully of fruit, and not one of them was ſeized with the diſtemper; but the coachman, who, being ſwayed by vulgar prejudice, would not taſte any, was attacked in a violent degree. And in that ſame year, in the ſouth of France, the dyſentery having nearly deſtroyed a whole regiment of Swiſs, the officers at length purchaſed the entire crop of ſeveral acres of vineyard, whither they carried the ſick ſoldiers, and gathered the grapes for ſuch as could not bear being taken to the field; thoſe who were well, making this fruit the beſt part of their diet: after this, not one man died, nor were any more even attacked with the dyſentery.

Theſe hiſtories, to which more might be added, are here mentioned, in order to remove the vulgar prejudice; and to ſhew that ſo far ought we to be from forbidding to eat plentifully of freſh vegetables, and particularly the ſubacid fruits, while putrid fevers and dyſenteries are epidemic, that, on the contrary, people ſhould be encouraged to take them freely; ſince both obſervation and experiments tell us, that thoſe juices counteract the acrimony which produces theſe diſeaſes.

As to the regimen in dyſenteric caſes, which are not accompanied with ſuch evident and high degrees of putrefaction, it ought to conſiſt of rice-water,

water, rice-jelly, ſalep, ſago, decoctum album, (Ph. Lond.) decoctum cretaceum, (Ph. Edinb.); ſometimes light chicken-broth, or beef-tea, but no ſolid fleſh-meat. When flatulencies are particularly diſtreſſing, a tea-cupful of camomile-tea, or a light infuſion of cinnamon, or aromatic cloves, will be found to give relief.

The vitrum antimonii ceratum, which was once ſo highly extolled, appears to have fallen into neglect on account of the extreme uncertainty of its operation, which, it muſt be confeſſed, is the fault of all antimonial preparations; nevertheleſs, in caſes where the remedies propoſed ſhall be found ineffectual, it ought to be tried: in general, ſmall doſes of ipecacoan, either alone or with a little emetic tartar, will ſeldom fail, if ſeaſonably applied, in ſuch caſes as are capable of being relieved: for there are many of the epidemic dyſenteries of ſo fatal a nature, and which proceed from ſo cauſtic an acrimony, that no medicine hitherto known has been found able to counteract its effects. The total loſs of ſtrength, the ſinking of the pulſe, the ſwelling of the abdomen, the blackiſh ſtools, and the cold clammy ſweats, may aſſure us that every endeavour to ſave the patient muſt prove ineffectual.

Sauvages has thought proper to make no leſs than twenty ſpecies, as he terms them, of the dyſentery; it is plain, however, from reading the deſcriptions, that ſuch minuteneſs in regard to this diſeaſe is rather ſuperfluous; for the chief diſtinctions that here ſeem neceſſary are, whether the circumſtances and ſymptoms which indicate high degrees

degrees of putrefaction, or thoſe which point out inflammation, prevail moſt; ſince an attention to theſe will ſhew when we ought to perſiſt wholly in the antiſeptic regimen, and when incline to the antiphlogiſtic ſcheme.

As the dyſentery and diarrhœa are ſo nearly connected, and often run into each other, the method of treatment will be further conſidered in the following chapter.

CHAP. IV.

Diarrhœa; Lienteria; Cœliaca; Hepatirrhœa; and Melæna. Deſcriptions, and Methods of Treatment.

IN the *diarrhœa*, though the ſtools are often very frequent, and much larger than in the dyſentery, yet they are not ſo ſlimey, not tinctured with blood, (at leaſt but very ſeldom) nor accompanied with ſuch degrees of nauſea and weakneſs, and that ſevere griping and teneſmus, which diſtinguiſh the laſt mentioned diſeaſe.

The original ſpontaneous diarrhœa is to be diſtinguiſhed from a looſeneſs that is ſecondary, and ſupervenes a fever, or ſome other diſeaſe.

Of the diarrhœas which are to be conſidered as original diſeaſes, we may diſtinguiſh the following varieties:

1. *Diarrhœa ſtercoroſa*; wherein the diſcharges conſiſt chiefly of excrementitious matters, and which

which uſually ariſe in conſequence of a ſurfeit, or eating ſomewhat that has proved indigeſtible and irritating to the bowels. A flux of this ſort can hardly be conſidered as morbid, unleſs it either proves ſo violent, or continues ſo long, as to produce evident waſting and weakneſs. In ſuch caſes, the patients ſhould in the firſt place drink plentifully of weak broth; that made of lean veal, or ſheep's head, as being more gelatinous than mutton, beef, or chicken broth, is the moſt proper to ſheath, and waſh off every thing acrimonious or irritating.

If drinking freely of broth ſhould not be ſufficient to remove what offends the bowels, a doſe of rhubarb, with a grain or two of calomel, and one, or half a grain of emetic tartar, will generally be found to anſwer every medical intention.

But ſhould the purging continue, and much griping be ſuper-added, then we muſt conſider the caſe as tending to a dyſentery; and begin with the ſmall doſes of ipecacoan, at night giving a paregoric.

When every thing acrid ſeems to be removed, if the flux ſhould nevertheleſs continue, we may then proceed to check it by the decoctum ligni campechenſis; or, if it ſhall appear that an acid ſaburra ſubſiſts in the firſt paſſages, a mixture of gum arabic and creta præparata, in lime-water, flavoured with tincture of cinnamon.

2. *Diarrhœa bilioſa*; which proceeds from an exuberance of bile, and may be known by the appearance of the ſtools, as being highly tinctured with

with this humour. This variety of diarrhœa is accompanied with nauſea, bitter taſte in the mouth, yellowneſs of the tongue, thirſt, griping, and generally ſome degree of fever.

It is uſually after a ſeries of very hot weather that fluxes of this ſort prevail; the ſcheme of management at firſt ſhould conſiſt in obtunding the ſharpneſs of the bile, at the ſame time that we favour the diſcharge of it; hence thin water-gruel, or rice-water, will be a proper drink, and rather preferable to broths. And the ſolution of Rochelle ſalt, with a due proportion of emetic tartar, will be a better cathartic than rhubarb. If the purging ſhould continue, recourſe muſt be had to the ſmall doſes of ipecacoan, and other remedies already mentioned.

3. *Diarrhœa ſeroſa*; wherein the ſtools conſiſt chiefly of watery fluid. Theſe ſerous fluxes are ſeldom accompanied with ſo much griping and nauſea as the bilious. After having cleared the inteſtinal canal by rhubarb, joined with a due proportion of emetic tartar, if the flux ſhould perſiſt, we are to begin with the ſmall doſes of ipecacoan, as directed in the other varieties: ſhould this remedy fail, and there be no fever, nor any remains of griping or nauſea, we may then ſafely proceed to the uſe of aſtringents.

Both ſerous and bilious fluxes are frequently to be conſidered only as ſecondary diſeaſes.

A dyſentery often terminates in a ſerous diarrhœa, and in theſe caſes, it is ſometimes found very

very difficult to put an end to the flux: change of climate, or ſituation; exerciſe on horſeback, or ſailing, are of great uſe in helping to divert the flow of humours from the inteſtines. At the ſame time, the patients ſhould keep themſelves warmly clothed, and ſuch medicines ſhould be given as ſhall tend to increaſe the cutaneous diſcharges. Opium, joined with ipecacoan, will promote a diaphoreſis, but muſt not be too often repeated, as this compoſition always leaves a general weakneſs behind it. As the decoctum ligni campechenſis will ſometimes be found too weak an aſtringent, in theſe caſes we ſhall be obliged to try others that are more powerful. An ounce of galls, with as much ſtarch, and a drachm of nutmeg, mixed and made into a powder, is a famous empirical remedy, and, where aſtringents can be given with ſafety, will be found of great uſe; the doſe is from one ſcruple to two, twice or thrice a day.

Lignum campechenſe, and cinnamon macerated in lime-water, forms a tincture which is both a grateful and powerful aſtringent. Simple lime-water, mixed with milk, will be a proper drink in theſe caſes, and ſometimes will be found ſufficient, without further aid to ſtop the looſeneſs. The diet ought to conſiſt of rice boiled with milk, and flavoured with cinnamon; rice-jelly; ſago, with red-port; the lighter ſorts of fleſh-meat roaſted, and taken without greaſy ſauces; cheeſe is allowable, but no crude or flatulent garden ſtuff.

The apoplexy, and ſome caſes of palſy, as well as dropſy, are now and then carried off by a purging of

of watery humours. The like ſort of looſeneſs is alſo common toward the decline of the confluent ſmall-pox, eſpecially in younger ſubjects; whereas a plentiful diſcharge of ſaliva is peculiar to grown perſons in theſe circumſtances, and carries off the watery fluids that ought to paſs by the pores of the ſkin.

A bilious diarrhœa is ſometimes found to ſupervene and carry off the fomes of a remittent or intermittent fever; and, in continued fevers, when the ſtomach and inteſtines have not been well cleared by an emetic at the commencement of the diſeaſe, a looſeneſs will often ſucceed toward the decline. The management in regard of all theſe ſecondary fluxes muſt be regulated according to the nature of the original diſeaſe, and great caution is required leſt the ſalutary tendency of the diſcharge be prevented by the improper uſe of aſtringents.

Worms will ſometimes be found to cauſe a looſeneſs. This happens chiefly in children, and may be known from the ſlimineſs of the ſtools mixed with pieces of decayed worms. Rhubarb with calomel will be the principal remedy in the *diarrhœa verminoſa*, as this variety of the diſeaſe is termed. Afterwards lime-water, with a ſmall quantity of rhubarb infuſed, will generally anſwer to ſtrengthen the bowels, and prevent the new generation of worms.

The colliquative diarrhœa, that ſo often cloſes the ſcene in a hectic fever, is beyond the power of Art;

Art; clyſters of milk, with a due proportion of thereaca andromachi, will ſometimes check theſe purgings, and procure a temporary relief.

Cœliaca, and Lienteria.

There have been ſo few caſes of theſe ſpecies accurately deſcribed, that there is ſcarcely a foundation for conſidering them as any other than different varieties of inveterate diarrhœa: neither does it ſeem neceſſary, in forming the indications of cure; which, in theſe chronic caſes, muſt be attempted on the plan already laid down for the flux that ſucceeds a dyſentery.

Hepatirrhœa.

A purging of bloody ſerum will ſometimes ſucceed the putrid dyſentery, and remain for a conſiderable time after the griping and teneſmus ceaſe to torment the patient, and the feveriſh ſymptoms have ſubſided. The cure in ſuch caſes may poſſibly be accompliſhed by the tincture of logwood in lime-water, or the aſtringent powder of galls and ſtarch, formerly mentioned.

The ſame ſpecies of flux is frequent in the putrid ſcurvy, when the diſeaſe is far advanced, and ſoon carries off the patient. It has alſo been obſerved to attend the paroxyſm of a malignant intermittent fever; in which caſe, the cortex given largely in red wine muſt be the remedy.

In all theſe caſes, the name of the diſeaſe is improper; but it ſometimes happens, that a flux of bloody ſerum, or of purulent matter ſhall in

in reality proceed from the liver, as may be inferred from the ſigns which ſhew this viſcus to be affected.

In the *hepatirrhœa vera*, it will be proper to combine the milder balſams with the other remedies; and the cure muſt be conducted agreeably to the method propoſed for the tabes hepatica.

In the hot countries, a flux of pure blood, without griping, is ſometimes obſerved to iſſue from a higher ſource than the hæmorrhoidal veſſels. Unleſs ſuch a diſcharge as this is occaſioned by a real plethora, it can hardly be expected that the diſeaſe will be cured; for if it proceeds from a diſſolution of the blood, there ſeems but little room to hope for ſucceſs. The cortex, however, with the vitriolic acid, ought to be tried.

Melæna.

The ſpleen is ſuppoſed to be the ſource of that blackiſh humour which diſtinguiſhes this ſpecies of flux.

A ſcorbutic diſſolution of the blood will alſo give riſe to a black flux, which may be deemed an incurable caſe; but when there are no evidences of this general diſſolution, nor diſtinguiſhing ſcorbutic ſymptoms preſent, the cure may be perhaps accompliſhed by the tinctura roſarum, or decoctum ligni campechenſis, joined with the vitriolic acid; gentle doſes of rhubarb, with a grain or two of emetic tartar, being occaſionally interpoſed.

Black ſtools ſupervening a dyſentery, putrid fever, or internal inflammation, may be held as fatal

fatal ſigns; but theſe are eaſily diſtinguiſhed from the diſcharges in the melæna, by the intolerable cadaverous fœtor.

CHAP. V.

Hæmorrhages; different Species, and Methods of Treatment.

IN the natural and healthy ſtate, while the coagulable lymph is in due proportion, and of the right quality, the blood has a certain viſcidity, which prevents it from eſcaping through thoſe pores in the coats of the arteries, that allow the oily and lymphatic fluids to ouze forth; and there is moreover a mucus which adheres ſo cloſely to the interior ſurface of the blood-veſſels, that it is perceivable long after the blood is waſhed out of them. Sauvages, who made the experiment, aſſures us, that even after the tenth injection of pure water, the water, as it flowed out, was found to have a degree of ſlipperineſs, as if ſoap had been diſſolved in it.

The greater the degrees of ſtrength and firmneſs in the vaſcular texture, and the more the body is exerciſed, the more obſervable is the viſcidity of the blood; but certain miaſmata, and different ſpecies of acrimony, have the power of deſtroying this healthy craſis, and then the blood becomes liable to tranſude through the pores, or to flow into the leſſer ſeries of veſſels, which naturally convey

convey only pellucid lymph : we are to obſerve, however, that while the momentum, or circulating force of the blood remains in equilibrio with the firmneſs of the vaſcular texture ; or while the circulating force and tenacity of the blood are duly proportioned to each other, no hæmorrhage can happen.

When the increaſe of circulating force is ſuch as to overcome the firmneſs of the vaſcular texture, and forces out blood which wants nothing of its natural viſcidity, then enſues what the writers term an Active Hæmorrhage ; but when there is a ſolution of continuity, or predominant relaxation in the vaſcular texture, or want of the proper degree of tenacity in the blood, then the hæmorrhage which enſues is called a Paſſive one.

Diſcharges of blood, which proceed from internal cauſes, are uſually preceded, like febrile diſeaſes, by a general languor and oppreſſion, accompanied with ſhivering and ſenſation of exceſſive cold ; circumſtances which ſhew that there is a ſpaſmodic conſtriction, rendering the circulation through the finer arteries difficult, and throwing the general maſs of fluids in upon the center ; if the conſtriction keeps up, and the veſſels remain entire, a fever will take place ; but if the coats of the veſſels in particular places be ſo weak and yielding, that they are either torn, or ſuffer extraordinary dilatation of their pores and open extremities, then, inſtead of a fever, the blood pours out, and an hæmorrhage appears.

The

The hæmorrhages which we are to conſider in this place, may be divided into five ſpecies:

I. *Epiſtaxis*, or bleeding from the noſe.

II. *Hæmoptyſis*, or ſpitting of blood.

III. *Hæmatemeſis*, or vomiting of blood.

IV. *Hæmaturia*, or diſcharge of blood from the urethra. And,

V. *Hæmorrhois*, or diſcharge of blood from the anus.

(The menorrhagia and abortus are referred to the ſexual diſeaſes.)

I. *Epiſtaxis.* Bleeding from the noſe is a frequent complaint, but ſeldom ſo violent as to require medical aid.

When we obſerve this ſpecies of hæmorrhage in an inflammatory fever, we are not to be over-ſolicitous about checking it, unleſs it becomes ſo exceſſive, or continues ſo long as to threaten the patient's life; becauſe theſe fevers often terminate by a bleeding at the noſe. And, in general bleedings from the noſtrils are ſeldom productive of much diſtreſs, as long as we find the pulſe ſtrong and full, the cheeks and lips preſerve their natural redneſs, and the animal heat extend itſelf to the extremities of the body.

But when we find the pulſe begin to grow ſmall, weak, and frequent withal, and obſerve the lips and cheeks turn pale, the extremities grow cold, and the patient complain of weakneſs and nauſea,

nauſea, then it will be neceſſary to interpoſe, and endeavour to prevent any further diſcharge.

Laying a cold wet cloth to the nape of the neck, ſnuffing up vinegar, or a weak ſolution of white vitriol, and thruſting doſſils into the noſtrils rolled in the powder of bole, mixed with a little colcothar, or alum, are the common means uſed to check bleedings from the noſe.

If the pulſe and other circumſtances ſhew, that there is a general intenſeneſs of motion in the vaſcular ſyſtem, and that the hæmorrhage is of the kind termed Active, then, drawing blood from the arm, * and nitrous medicines will be proper; but if it ariſes from weak veſſels, or a diſſolved ſtate of the blood, ſtrengtheners and antiſeptics muſt be the remedies, particularly the cortex, with the acid elixir of vitriol.

When the bleeding will not yield to the methods already propoſed, we muſt have recourſe either to ſmall doſes of ipecacoan, or ſome of the antimonial preparations, given ſo as to excite nauſea and gentle vomiting. Or if all theſe ſhould fail, and the patient appears to be in danger of ſinking under the diſcharge; the ſurgeon muſt be called in, to plug up the noſtrils, in the way propoſed by le Dran.

* The blood drawn on theſe, and ſimilar occaſions, always has the buff, or pleuritic cruſt; another proof, that this appearance, is owing to the *diſſolved ſtate* of the *coagulable lymph*, which renders the blood more apt to eſcape, either from lacerated, or relaxed veſſels.

After the bleeding ſhall be entirely ſtopt, the patient is to be kept quiet; if coſtive, have a clyſter injected, and after its operation, take a paregoric.

Such hæmorrhages from the noſe as are periodical, generally ariſe from the ſuppreſſion of ſome natural diſcharge; young perſons of plethoric habits, and people advanced in years, who live full, are often ſubject to bleedings from the noſe, preceded by pain and heavineſs of the head, and a tendency to ſome comatous diſeaſe. Such perſons ought to make very light ſuppers, not lie with the head too warm, and take particular care that the bowels be kept open.

Sauvages makes ſeven diſtinctions of this ſpecies of hæmorrhage; but there ſeems to be no neceſſity for conſidering more than three varieties of the epiſtaxis.

1. *Epiſtaxis critica*; when the hæmorrhage may generally be left to Nature.

2. *Epiſtaxis activa*; when bleeding, cooling regimen, and ſedatives, are proper.

3. *Epiſtaxis paſſiva*; when ſtrengtheners, aſtringents, or antiſeptics, are required.

II. *Hæmoptyſis.*

By the term *Hæmoptyſis*, we are to underſtand thoſe ſpittings of blood only which come from the lungs, independent of inflammation; as ſpitting of blood is a frequent ſymptom in the pleuriſy and peripneumony.

It

It is eaſy to diſtinguiſh this diſeaſe by the appearance of the blood, as being florid, frothy, and coughed up in large mouthfuls; when it comes only from ſome of the veſſels in the fauces, it is in ſmall quantity, dark coloured, and without froth, and when thrown up from the ſtomach, there is always an effort to vomit.

The hæmoptyſis is ever to be conſidered as an alarming diſeaſe; and therefore it is the more neceſſary to diſtinguiſh the different varieties, ſince theſe will require ſome difference in the methods of treatment.

I. *Hæmoptyſis accidentalis*; which happens in plethoric habits, from irregularities in diet or exerciſe, independent of any hereditary diſpoſition, or acrimony in the blood.

II. *Hæmoptyſis habitualis*; which is incident to perſons who have ſharp juices and weak lungs, either native or acquired: theſe caſes are either preceded or accompanied by different degrees of fever, and for the moſt part end in a phthiſis.

III. *Hæmoptyſis periodica.* In conſtitutions where there are ſuppreſſions of the catamenia, or hæmorrhoidal diſcharge, periodical ſpittings of blood have been obſerved to ſupply the deficiencies.

IV. *Hæmoptyſis traumatica*; which is occaſioned by ſome wound or external injury.

In the caſes of *accidental* hæmoptyſis, there will be a neceſſity for repeated bleedings, in ſuch quantities, and at ſuch intervals as the particular exigencies ſhall be found to require; the diet

muſt be entirely of the lighteſt kind; no ſolid fleſh-meat, nor ſtrong broths; the drink, emulſions with nitre; two-milk whey; barley-water, or Seltzer water with milk: abſolute reſt muſt be enjoined, and ſilence, ſince ſpeaking would be apt to increaſe or excite the diſcharge. The belly muſt be kept open by clyſters, and reſt ſecured by opiates given at proper intervals.

But in conſtitutions where the craſis of the blood is previouſly injured, and where the lungs are *habitually* weak, we are not to expect ſuch advantages from large and repeated bleedings; and the moſt likely means of checking the hæmorrhage will be ſmall doſes of ipecacoan, vitrum antimonii ceratum, or emetic tartar. Nitre, in doſes of ten or twelve grains, taken four, ſix, or eight times a day, * will often anſwer; common ſea-ſalt, licked up, to the quantity of three, or four drachms, has been found to check an hæmoptyſis, after many other things had been ineffectually tried.

After the bleeding ceaſes, and it appears that there is no further extravaſation into the pulmonary veſicles, which may be inferred from the total abſence of pain, oppreſſion, cough, and difficulty of breathing, we may then venture to give ſtrengtheners; the cortex is perhaps the moſt effectual, in theſe, as well as in moſt other caſes where

* See Dr. Dickſon's paper in the 4th vol. Med. Obſervations, p. 206, which alſo contains ſome excellent remarks on the uſe, and abuſe of exerciſe, (riding eſpecially) in conſumptive caſes.

where we want to increaſe the firmneſs of the ſolids. A decoction, combined with ſome mild balſam, ſuch as that of Tolu, will be the proper form.

But if, in ſpite of every endeavour, the ſpitting of blood ſhould continue, or, though it ceaſes for a few hours, or perhaps days, ſhould return, with the complaints of oppreſſion and difficulty of breathing, a teazing cough, and a quick hard pulſe, we may look on things as in a moſt unpromiſing ſituation, ſince a phthiſis generally ſupervenes; and then the patient will have little elſe to depend on, but goat's whey in the proper ſeaſon; Briſtol, Mallow, or Seltzer water, with aſs's milk; pure country air, and moderate exerciſe by riding or ſailing.

The *periodical* hæmoptyſis can only be remedied by reſtoring the diſcharges, which happen to be ſuppreſſed, to their natural order; and the treatment of the *traumatica* muſt be conducted on the principles laid down for the *accidentalis*, only adapted to the particular nature of the injury which cauſes the ſpitting of blood.

The bleedings from the gums, and other parts, termed *Stomacace*, ariſing from a putrefactive diatheſis, are ſymptoms of the putrid ſcurvy, and do not require to be conſidered as a diſtinct ſpecies of diſeaſe: we therefore proceed to the

III. *Hæmatemeſis*. Vomiting of blood is a more frequent diſeaſe in women than men, and uſually

uſually ariſes from obſtructed menſes. When it happens in men, infarctions of the liver, or ſpleen,* are the common ſources of the diſeaſe.

Large bleedings do not anſwer in caſes of the hæmatemeſis, as the pulſe is apt to ſink under them; they muſt therefore be made ſparingly, and repeated according to the urgency of the caſe.

The bowels muſt be kept open by clyſters, or, if the ſtomach will retain it, by ſmall doſes of rhubarb; the propereſt drinks are, light infuſions of ſome grateful herb of the vulnerary and ſubaſtringent nature; weak tincture of roſes, or plain water acidulated with ſpirit of vitriol; and in order to ſecure the patient againſt returns of the complaint, the cortex, joined with ſome powerful ſtomachic, namely, colombo-root, ſnake-root, or orange-peel, muſt be adminiſtered in ſuch forms as ſhall be found to agree beſt with the ſtomach.

IV. *Hæmaturia.* When blood is diſcharged from the urethra in men, it may come from the veſiculæ ſeminales, and veſſels of the proſtate gland, as well as from the kidneys and bladder; and accordingly an hæmaturia has ſometimes enſued in conſequence of venereal exceſſes. The other cauſes of this ſpecies of hæmorrhage, and the moſt common, are ſtones or gravel lacerating the veſſels in different places of the urinary paſſages:

* The communication between this viſcus and the ſtomach, by means of the vaſa brevia, allows the blood to flow very readily into the latter, when the circulation through the veſſels of the former happens to be impeded.

ſuges: external injuries alſo may occaſion bloody urine, ſuch as falls, bruiſes, ſtrains, or too hard riding; but ſometimes an hæmaturia ariſes from a diſſolution of the blood, or from the great increaſe of its motion in highly inflammatory fevers; hence different varieties of the diſeaſe, of which Sauvages mentions no leſs than fifteen.

In caſes where the habit is full, and a tendency to inflammation, we muſt bleed repeatedly, keep the bowels open by gentle ſaline purges, and order emulſions with gum arabic; but in ſuch ſubjects as have the putrefactive diatheſis, and whoſe blood appears in a diſſolved ſtate, then a decoction of the cortex, or a tincture of it in lime-water, tincture of roſes, or alum-whey, will be more proper, in order to reſtrain the effuſion; afterwards, an electuary of the cortex, with terra japonica, and balſam of Tolu, or capivi, will bid fair to ſecure the patient againſt a relapſe, ſufficient doſes of rhubarb being occaſionally interpoſed.

When this diſeaſe proceeds from calculi, the remedies, during the fit, are, ſoftening and ſheathing emulſions, with due proportions of tinctura thebaica.

When bloody urine proceeds from a ſuppreſſion of the hæmorrhoidal or menſtrual diſcharges, if theſe cannot be reſtored to order, we muſt ſubſtitute repeated bleedings at proper intervals. In all caſes we are to be cautious of uſing ſtrong aſtringents; leſt theſe, by ſuddenly conſtricting the paſſages, might detain the grumous blood.

There

There is a caſe recorded in the Medical Eſſays, where bloody urine was occaſioned by a worm in the bladder.

V. *Hæmorrhois.* Diſcharges of blood from the anus, are of two kinds; the one attended with very ſevere pain, teneſmus, and frequent purging of ſlimey matter; the other, entirely free from ſuch diſtreſſing ſymptoms: the former is a variety of the dyſentery already deſcribed, the latter the diſeaſe we are now to conſider.

Piles, as they are vulgarly termed, though generally thought to be varicous enlargements of the hæmorrhoidal veins, are much oftener found to be fungous excreſcences, which ſprout from the verge of the anus, and frequently ouze forth large quantities of blood; blood is alſo liable to come in conſiderable quantities, from veſſels within the rectum; but in either caſe, theſe diſcharges, while they continue moderate, are not to be conſidered as alarming, but rather an effort of nature to free the habit from ſuperfluous blood; hence medical aſſiſtance is not required, except in caſes where the bleeding is either ſo violent, or of ſuch long continuance, as to bring on waſting and weakneſs.

When it is neceſſary to check the hæmorrhois, we may apply cloths to the anus or ſmall of the back, wet in cold water, or vinegar; or in a weak ſolution of white vitriol; and if theſe do not immediately anſwer, give a gentle emetic, either of ipecacoan or emetic tartar, and afterwards a paregoric. But as theſe hæmorrhoidal diſcharges

charges are uſually owing to obſtructions in the liver, hindering the free circulation through the vena portarum, we may always expect relapſes until ſuch obſtructions ſhall be removed; therefore, recourſe muſt be had to mineral waters, particularly the Vahls or Seltzer, aided by compoſitions of ſoap and the aperient gums.

Immoderate and long continued grief is obſerved to give riſe to the hæmorrhois, as well as to profuſe menſtrual diſcharges: in ſuch caſes nothing anſwers ſo well as travelling, to ſee new objects, and divert the mind; and, therefore, when practicable, this ought to be enjoined: as a pharmaceutical remedy, a tincture of the cortex in lime-water, * flavoured with tincture of cinnamon, and warmed with compound ſpirit of lavender, will in general be found of excellent ſervice.

* According to the following formula:

℞. Corticis Peruviani craſsè pulverati, uncias duas;
Affunde Aq. calcis ſimplicis libras duas; macerentur per triduum, deinde tincturam cola, et adde,
Tinct. cinnamoni unciam,
Sp. lavendulæ comp. unciam dimidiam.

From repeated experience, this lime-water tincture of bark, can be recommended, in preference to the ſpirituous tinctures; even ſuch ſmall doſes as two ounces, twice, or thrice a-day, will be found to ſtrengthen remarkably, in moſt caſes of uterine weakneſs, and in ſubjects liable to ſuffer abortion.

CHAP.

CHAP. VI.

Serous Diſcharges. Ephidroſis and Diabetes. Methods of Treatment.

SO far with reſpect to hæmorrhages. The third genus of fluxes comprehends only two ſpecies:

I. The *ephidroſis*, or colliquative ſweating. When profuſe ſweats are connected with a hectic, or other genus of fever, they are not to be conſidered as demanding peculiar methods of treatment; for until the fomes of the fever be corrected or expelled, we can never expect any laſting amendment: but ſometimes caſes occur, wherein there ſhall be profuſe ſweats, nightly waſting the body, and deſtroying the ſtrength and appetite, without fever or any other evident cauſe. The cure is to be attempted by purgatives at proper intervals, chalybeate waters, and ſtomachic ſtrengtheners, eſpecially the tincture of cortex in lime-water, with the cold bath, and moderate exerciſe.

In the very hot countries, it is a practice with the natives to rub their whole bodies with oil, as well as to uſe cold bathing, which no doubt tends to moderate the cutaneous diſcharge.

When colliquative ſweating ariſes from a putrefactive diſſolution of the blood, the remedies are, freſh vegetable juices, eſpecially of the ſubacid kind, joined to the uſe of the cortex. The ſame courſe

courſe will be proper in thoſe caſes where ſweats of different colours appear.

II. *Diabetes*; when the urine is diſcharged in ſuch quantities as to bring on waſting, weakneſs, thirſt, and loſs of appetite.

This is an uncommon diſeaſe, and very difficult to cure.

In the true diabetes, the urine has a ſweetiſh ſmell and taſte, as if honey or brown ſugar had been diſſolved in it; and if evaporated over a ſlow fire, it will leave a reſiduum, reſembling a baked pudding, retaining the above-mentioned ſweetiſh ſmell. In a moſt ingenious paper, on this ſubject, by Dr. Dobſon, of Liverpoole, in the 5th vol. of the Medical Obſervations, this ſweetiſhneſs of the urine is clearly accounted for, and a number of very important remarks are made concerning the nature of the ſaccharine matter that is found in the juices of healthy animals; which may ſerve to illuſtrate the theories of other diſeaſes, as well as the diabetes, which appears to be an affection of the whole habit, and not depending merely on the liver, as Dr. Mead ſuppoſed, or on the relaxed ſtate of the kidneys, according to the common opinion.

Sauvages terms this with the ſweet urine, *Diabetes Anglicus*, as being ſuppoſed a frequent diſeaſe among the Engliſh, who are alleged to drink immoderately. He alſo mentions other varieties, as *diabetes hyſtericus*, *diabetes arthriticus*, and *diabetes febricoſus*. The firſt is found in hyſterical conſtitutions, and conſiſts in large diſcharges of limpid urine.

urine. The ſecond is peculiar to perſons worn out with the gout; during the paroxyſms of pain, the urine is in ſmall quantity, and turbid; but in the intervals the diſcharge is profuſe and limpid, from the perſpiration's becoming deficient. And the third variety was obſerved to ſupervene intermittent fevers in aged people.

The plan in all theſe caſes muſt be, to ſtrengthen the digeſtive, and chylopoietic organs, and reſtore freedom to the cutaneous diſcharge, by that means recalling the watery fluids from running too much to the kidneys; hence keeping the body warmly clothed may be of great uſe. Alum-whey, is ſtrongly recommended by Dr. Mead: chalybeate waters have been found uſeful in ſome caſes, and in others the Briſtol water has appeared to palliate matters for a time. The tincture of cortex in lime-water bids fair to be of ſervice, and may be tried.

A METHO-

A

METHODICAL INTRODUCTION

TO THE

PRACTICE

OF THE

ART OF MEDICINE.

BOOK IV.

PAINFUL DISEASES.

CHAP. I.

History of the Gout; its different Species; and Methods of Treatment.

DR. LIGER, a French physician, who has written a treatise expressly on this disease, holds the gouty humour to be of a viscid nature; and this opinion he founds on the appearances in dissecting the joints of gouty subjects, which are observed to be loaded with a tough mucilage, adhering to the capsular ligaments and sheaths of the tendons: the urine also of such persons is observed to depost a similar kind of slimey matter, termed by the

the ancients Pituita Vitrea; and the blood which is drawn during a fit of the gout has a whitiſh ſcum, like the pleuritic cruſt, but not altogether ſo compact.

But it has been already ſhewn that this buff on the ſurface of the craſſamentum, is a clear evidence that the blood, is in a ſtate, diametrically oppoſite to that of viſcidity; and all the other appearances may be rather deemed effects, than cauſes of the gout, ſince they are only peculiar to ſubjects who have been long afflicted: the celebrated baron Van Swieten thinks that this accumulation of viſcid ſlime is owing to the frequent attacks of the diſeaſe, which render the veſſels about the joints incapable of tranſmitting the earthy particles intended for nouriſhing the bones; theſe being thus retained, inſpiſſate the ſynovia, and form the chalky concretions: and he agrees with his great maſter Boerhaave in conſidering the arthritic acrimony as a moſt ſubtile ſpecies of matter, affecting the nervous fluid, or acting ſolely on the nervous ſyſtem; and that it is in vain to ſearch for it in the groſs humours.

The extreme ſubtility of the arthritic acrimony, and its not yielding to any alterative that has yet been diſcovered, has induced ſome writers to trace the gout from other ſources; particularly a late writer, * who imagines that the diſeaſe conſiſts in a cloſing up of the finer arteries; and that the pain, during the fit, ariſes from the effort which is made by the blood to force theſe open.

Liger,

* Dr. Caverhill.

Liger, contrary to moſt other writers, looks on malt liquors as more apt to produce the gouty diatheſis than wines; but he conſiders cyder as ſtill more pernicious than ale; and, in confirmation, obſerves, that in Champaign and Burgundy, where they drink nothing but wine, the inhabitants are free from the gout; while the Normans and Flemings, whoſe principal drinks are cyder and malt liquors, are found to be very much afflicted.

Dr. Muſgrave, who practiſed at Exeter, mentions Devonſhire as full of gouty patients, which may be brought in evidence againſt the cyder, ſince this is the common drink in that and ſome adjoining counties: but with reſpect to malt liquors being more apt to produce the arthritic acrimony than wines, the obſervation certainly does not hold good, either in theſe countries, where it is rare to meet with a gouty patient among any but wine-drinkers, or in Holland, where, as Van Swieten tells us, the gout was ſcarcely known as long as the common drinks continued to be brewed from malt; but of late years, ſince wines have come into more general uſe, it is become a frequent diſeaſe.

It may be laid down in general, that high-living, feeding on what are termed Made-diſhes, drinking freely, and neglect of bodily exerciſe, are the things which moſtly favour the production of arthritic acrimony; and that men of quick and lively imaginations are moſt diſpoſed to the attacks of this

this diſeaſe, which ſeldom ſeizes them until they are arrived at, or rather paſt, the prime of life: the gout, however, is not altogether peculiar to this ſtage of life; nor is it a diſeaſe abſolutely proper to the male ſex; there being now and then caſes ſeen, where young lads, or even girls, as well as women, are the patients.

There are few writers who ſurpaſs Sydenham in deſcribing ſuch diſeaſes as he has treated of; and as he had the misfortune to labour under repeated attacks of the gout for more than thirty years, we may well believe that the deſcription is accurate; and ſhall, therefore, without further apology, tranſcribe his account of the whole progreſs.

The gout generally attacks in cold weather, about the cloſe of January or beginning of February; the patient, after having been troubled with much flatulency for ſome weeks, and an unuſual ſenſation of a load and ſickneſs at the ſtomach, with a general languor and heavineſs, finds the appetite for food uncommonly keen the day preceding the fit, goes to bed, and ſleeps quietly till about two in the morning, when he is awakened by a pain which uſually ſeizes the great toe, but ſometimes the heel, the calf of the leg, or ankle.

The pain reſembles that of a diſlocated bone, and is attended with a ſenſation as if water juſt warm were poured on the membranes of the part affected, and theſe ſymptoms are immediately ſucceeded by a chilneſs, ſhivering, and then a feveriſh heat. The chilneſs and ſhivering abate in proportion

tion as the pain increaſes, which is mild in the beginning, but grows more violent every hour, and comes to its height toward evening, ſometimes reſembling a laceration of the ligaments of the tarſus and metatarſus; ſometimes the gnawing of a dog; and ſometimes a weight or conſtriction of the part affected, which often becomes ſo exquiſitely painful as not to endure the weight of the bed-clothes, or the ſhaking of the room from a perſon's walking briſkly through it. The pain does not abate till two or three next morning; that is, in twenty-four hours from the beginning of the fit, when the patient, being in a breathing ſweat, falls aſleep, and at waking finds the foot conſiderably ſwelled. The next day, and for two or three days afterwards, if the arthritic acrimony be very abundant in the conſtitution, the pain will continue, and increaſe toward evening, and at length ſeize the other foot; while that which was firſt ſeized becoming quite eaſy, the weakneſs ſoon vaniſhes, and it grows as ſtrong as if it had never been affected.

Nevertheleſs, the pain affects the foot juſt ſeized, as it did the former, both in reſpect of vehemence and duration, and ſometimes when there is ſuch a quantity of gouty humour in the beginning of the fit, that one foot is unable to contain it, both are attacked at the ſame time with equal violence; though it is moſt common for the feet to ſuffer in ſucceſſion. After each of them has been attacked, the ſubſequent fits are not re-

gular either as to the time of ſeizure, or duration; but the pain always increaſes in the evening, and remits toward morning.

What is commonly termed a Fit of the Gout, which goes off ſooner or later according to the age and ſtrength of the patient, is a ſeries or ſucceſſion of theſe ſmaller fits, gradually becoming milder and milder, till the whole of the arthritic matter expends itſelf; which in ſtrong conſtitutions, and ſuch as ſeldom have the gout, often happens in fourteen days; and in the aged, and thoſe who have frequent returns of the diſeaſe, in two months; but in ſuch as are more debilitated, whether from age or long continuance of the diſtemper, the fits do not ceaſe until the ſummer advances, and the heat of the weather aſſiſts in expelling the cauſe.

During the firſt fourteen days the urine is high coloured, and after ſeparation lets fall a kind of red gravelly ſediment; not above a third part of the liquids taken are voided by urine, and the body is generally coſtive during this time.

The fit is accompanied throughout with loſs of appetite, chilneſs of the whole body toward evening, and a heavineſs and uneaſineſs of thoſe parts that are not affected with the diſeaſe. When the fit is going off, a violent itching ſeizes the foot, eſpecially between the toes, from whence the ſkin peels off. The diſeaſe being over, the ſpirits become alert, the appetite grows keen, and the ſtrength returns, ſooner or later, as the immediately preceding fit hath been more or leſs ſevere; and in conſequence

conſequence of this, the following paroxyſm comes on in a ſhorter or longer ſpace of time; for, if the fit proves very violent, the gout will not attack the patient at ſooneſt before the return of the ſeaſon.

This is the manner in which the gout appears while the paroxyſms are regular; and when the diſeaſe has not been exaſperated, nor its natural courſe interrupted by wrong management; and in caſes where the quantity of gouty humour is moderate: but when this acrimony becomes ſo abundant, that the ſubſtance of the body ſeems in ſome meaſure changed into ſupplies for the diſeaſe, and Nature is unable to expel it in the uſual way, the ſymptoms will differ conſiderably from thoſe juſt now mentioned. For, the pain, that hitherto has been ſuppoſed as confined to the feet only, (which are the genuine ſeats of it, for whenever it attacks any other part, we may be aſſured, that either the courſe of the diſeaſe is perverted, or the natural ſtrength much impaired) now ſeizes the hands, wriſts, elbows, knees, and other parts, no leſs ſeverely than it did the feet before. Sometimes it renders one or more of the fingers crooked, and by degrees motionleſs, and at length forms earthy concretions in the joints, not unlike chalk or crab's eyes; and ſometimes the humour is thrown upon the elbows, and occaſions a whitiſh ſwelling almoſt as large as an egg, which gradually inflames: at length the joints become ſtiff, the limbs waſte, and the tendons

contract themſelves in ſuch manner that the patient can with difficulty move about. The urine reſembles that which is made in the diabetes, as being turbid and whitiſh, while the back and other parts break out in itchy eruptions. As the gout in the former inſtance did not uſually come on, until the decline of winter, and went off, in two or three months, in the preſent caſe it continues the whole year, except the warmeſt part of ſummer; and as the general paroxyſm now continues much longer, ſo the particular fits, of which the general one is made up, rage for a longer time, and the other ſymptoms of ſickneſs and loſs of appetite are likewiſe exaſperated: but in the end, when the diſeaſe has continued for ſeveral years, the pain gradually diminiſhes, and the patient ſinks, rather from ſickneſs than pain, which, in theſe latter paroxyſms, though they be longer, is not near ſo violent as what was uſually felt when the ſtrength was but little impaired.

For the pain in this diſeaſe is a conſequence of the efforts of Nature to expel ſomewhat that is injurious; and though it be a diſagreeable remedy, yet the ſharper it proves, the ſooner the fit terminates, and the longer and more perfect is the intermiſſion.

Since a fit of the gout is a critical effort, regular practitioners are cautious how they interfere, leſt the offenſive particles be repelled and thrown in upon ſome important organ; and therefore, in the height of the fit, they are extremely guarded, eſpecially

eſpecially in reſpect to external applications and opiates, both of which impatient people might be tempted to uſe, in order to obtain relief from the preſent pain. The only external applications that are deemed allowable, being poultices of bread and milk, with a little ſaffron and yolks of eggs; or a ſolution of ſoap in warm water; or, in ſome caſes, ſoap ſoftened and ſpread thick on cloths: but in general it is held ſafeſt to abſtain entirely from theſe or the like applications, and only wrap the part affected in new combed wool, or in the ſofteſt flannel, in order to promote perſpiration, and thereby contribute to the diſſipation of the gouty humour.

As to internals during the fit, there are not many required; a gentle emetic (ſuch as an infuſion of camomile-flowers, or of carduus leaves, with ſome port-wine, if the patient be languid) will be of uſe in helping to unload the ſtomach in the beginning of the paroxyſm; and during its continuance, in order to keep the bowels open, we are either to direct clyſters, or order proper doſes of tinctura ſacra, or infuſion of ſena warmed with the tincture of ſena, or, mixed with ſome magneſia alba if the ſtomach ſhould chance to be loaded with acid ſaburra.

Bleeding, in very full habits, and at the firſt attacks of the diſeaſe, will be adviſable; but muſt never be practiſed in the weak, the aged, or thoſe who have had repeated fits of the gout; and, in general,

neral, Sydenham appears to have been extremely fearful of bleeding in any caſe.

Thus we may obſerve, that during the paroxyſm there is but little room for medicine, as long as the humour remains depoſited on the joints, which are the places naturally deſtined for receiving it; but when it deſerts theſe, and falls on ſome of the internal parts, then all our endeavours muſt be uſed to recall and fix it.

We may know that the gout affects the head, if the pain of the joints ceaſes, and the ſwelling diſappears, while at the ſame time either ſevere headach, ſleepineſs, vertigo, tremor, convulſions, or delirium come on; or that it has ſeized the lungs, if great oppreſſion, with cough and difficulty of breathing, enſue; or, laſtly, the ſtomach, if vomiting, with extreme ſickneſs, anxiety, and total loſs of ſtrength, and a ſharp pain in the epigaſtric region, ſhall ſucceed.

In all theſe caſes, which are extremely hazardous, and admit not the leaſt delay, we muſt immediately endeavour to relieve the internal parts, and fix the pain again in the extremities. If the gout appears to have attacked the head, and the patient is of a full habit, we are to order bleeding proportioned to the degree of plethora; bliſters to the inſides of the thighs and legs; bathe the feet in hot wine, or ſome ſpirituous fomentation, in which ſome freſh-ſcraped horſe-radiſh root has been boiled, and common ſalt diſſolved, and apply ſinapiſms to the feet.

If

If the lungs be affected, and there is danger of ſuffocation, we muſt alſo bleed, and apply the bliſters, fotus, and ſinapiſms juſt now mentioned.

But if the ſtomach be attacked, we are to give hot wine, boiled up with ſpices; or, which is reckoned better, eſpecially in old ſubjects and hard drinkers, burnt brandy, with ſpices; or, if it be at hand, the dram called Uſquebaugh: for Mead obſerves, that when the gout attacks the ſtomach, wine ſeems no ſtronger than water, and the ſtomach becomes ſo cold and torpid, that it eaſily bears the hotteſt liquors.

If theſe things ſhall chance to be thrown up by vomiting, we muſt give, along with the cordials, ſixteen or twenty drops of tinctura thebaica at proper intervals.

Such are the principal means to be uſed during the paroxyſms of the gout; but, in order to prevent returns, the ſcheme with regular practitioners is chiefly to ſtrengthen the ſtomach, and prevent the firſt paſſages from being loaden with different kinds of ſaburra, ſince it ſeems pretty evident, that the gout firſt takes its riſe from a depravation of the digeſtive fluids; and hence it is, that aromatic bitters are the medicines principally inſiſted on, with a view to prevent the return of the gouty paroxyſm.

The powder called the Duke of Portland's, * which was once much cried up, has been known to keep

* It conſiſts of equal parts of rad. gentian. and ariſtoloch. rotund. fol. chamædryos, et chamæpityos, et ſummitat. centaur. min.

keep off the paroxyſm ; but then there have been inſtances where the medicine appeared, as it were, only to ſtifle the diſeaſe, which, at length, has broke out with redoubled violence : for theſe powders, like all other bitters, by too long continued uſe, debilitate the powers of the digeſtive organs. In caſes where the ſtomach appears loaden with viſcid pituita, the fixed alcaline ſalts, or lime-water, in which ſome of the aromatic bitters have been infuſed, promiſe to be of ſervice. Soap is the favourite remedy with Liger, becauſe he judges it capable of diſſolving the mucilage, which he conſiders as the cauſe of the diſeaſe ; and Lieutaud, another French writer of eminence, alſo highly commends this medicine : they order it to be joined with bitters, ſuch as the extract of gentian, and a ſmall quantity of rhubarb or aloes.

In all caſes whatever where the ſtomach is diſtreſſed by an acid ſaburra, ſoap will conſtantly diſagree, as the acid decompounds it, and ſets the oily part free, which ſoon becoming rancid, occaſions a moſt troubleſome heart-burning : in theſe circumſtances magneſia alba may be interpoſed with great advantage ; but where digeſtion has been ſpoiled by frequent debauches, nothing anſwers ſo well as drinking the Bath water.

But proper diet and regimen alone are what bid the faireſt to prevent returns of the gout ; ſince no medicine,

min. The doſe is a drachm, every morning, for the firſt three months ; for the enſuing ſix, two ſcruples ; and for the three remaining months, half a drachm. The ſecond year requires only half a drachm, every other day.

medicine, yet known, has the power of making that thorough change in the conſtitution, which is requiſite to deſtroy the ſeeds of the diſeaſe. A total abſtinence from animal food, and fermented liquors, and living entirely on milk and vegetables, have been known to eradicate the gout; but this ſcheme cannot be put in practice by any but the youthful and vigorous; for ſuch as are aged, or much broke down by the diſeaſe, cannot venture to live ſo low. Briſk exerciſe is of the utmoſt importance; and friction of the feet with flannels is of very great uſe in preventing or moderating the violence of the fit.

The gout being one of thoſe diſeaſes whoſe true nature is but little underſtood, it may ſeem of little importance to diſtinguiſh the ſpecies and varieties; but if we are to credit Sydenham, this circumſtance ought to make phyſicians the more careful in noting even the ſmalleſt particularities, ſince that is the "ſhorteſt and beſt way of coming at the "knowledge of the morbific cauſes which they are "to encounter."

We may conſider the gout as diſtinguiſhable into three ſpecies:

I. *Arthritis podagra, regularis, ſimplex*; the common regular gout, which invades in ſpring or autumn, and proceeds in the manner above deſcribed; whoſe paroxyſms do not continue at moſt above one or two months, and leave the patient perfectly free from weakneſs, oppreſſion, or ſickneſs, during the intervals. The pain and

and ſwelling, while the fit laſts, being confined to the feet.

II. *Arthritis gonagra*, ſeu *chiragra*, *irregularis*; the irregular gout, wherein the pain flies about, and attacks the hands, knees, and elbows, whoſe paroxyſms laſt ſometimes the whole year, excepting the three hotteſt months in ſummer, leaving the patient lame or feeble, with but an indifferent appetite even during the intervals.

III. *Arthritis complicata*; wherein there are ſymptoms of other diſeaſes, combined with thoſe which particularly mark the gout; whence

1. The *arthritis rheumatica*,
2. ——— *chlorotica*,
3. ——— *melancholica*,
4. ——— *ſcorbutica*,
5. ——— *ſyphilitica*,
6. ——— *aſthmatica*,
7. ——— *rachialgica*,
8. ——— *exanthematica*,
9. ——— *rachitica*;

which may be all conſidered as varieties of the complicated gout.

The 1ſt, as being joined with a rheumatic acrimony.

2d, As ſupervening obſtructed menſtrua.

3d, Which ſeizes hypochondriac or vaporiſh people.

4th, When

4th, When there is an eruption of thoſe hot itchy pimples, uſually termed ſcorbutic, ſhewing an unuſual ſharpneſs of the juices.

5th, When the venereal virus, not having been ſufficiently eradicated, mixes itſelf with that which creates the gout; and cauſes the pain to rage with unuſual violence during the night-ſeaſon.

6th, When the fits of the gout and aſthma ſeize the patient alternately; the breathing being free, while the joints are in pain, and vice verſa.

7th, When the gout ſupervenes a nervous colic.

8th, When cutaneous eruptions of any kind, either acute or chronic, precede a fit of the gout.

9th, Wherein there is ſuch a brittleneſs of the bones, that they can ſcarcely ſupport the weight of the body without breaking. *

* There are two papers in the 3d vol. of the Edinburgh phyſical and literary Eſſays, one by Dr. Clerk, the other by Dr. Whytt; Art. XIX. and XX. which contain ſome excellent remarks, and extraordinary caſes of the irregular gout.

CHAP.

CHAP. II.

Of the Rheumatiſm: Hiſtory of the Diſeaſe; different Species and Varieties; with the Methods of Treatment.

THE *rheumatiſm* is, in appearance, ſo nearly allied to the gout, that they have been conſidered as one diſeaſe, eſpecially by the early writers: attentive obſervation however ſhews, that they are diſtinct genera, and that the rheumatic acrimony, is at leaſt as different from the arthritic, as that which gives riſe to the meaſles, is from what produces the ſmall-pox.

The morbific matter in the rheumatiſm fixes on the muſcles, together with their common membrane, and the tendons; whereas the arthritic acrimony is directed to the ligaments which connect the joints: what it is that conſtitutes the difference, or why the one ſpecies of acrimony ſhould depoſit itſelf in one place, and the other ſettle itſelf in another, are points of which we ſhall not attempt the explanation.

The ſuppreſſion of natural diſcharges, the living in damp ſituations, or in new-built houſes, neglect of exerciſe, and the ſtriking in of cutaneous eruptions, are what uſually give riſe to the rheumatiſm; but the catching of cold, as it is called, is what for the moſt part immediately brings on the fit. Hence it is, that autumn and the

the beginning of winter are the ſeaſons wherein rheumatic complaints are moſt frequent.

There is one ſpecies of rheumatiſm, attended by febrile ſymptoms, and which therefore may be termed *Acute*; and another, without fever, thence denominated *Chronic*.

The *acute* ſpecies generally affects ſuch as are in the prime of life, and begins with a chilneſs and ſhivering, which are ſoon ſucceeded by heat, reſtleſſneſs, thirſt, and other concomitants of a fever.

In a day or two, or ſometimes ſooner, there ariſes an acute pain in ſome or other of the limbs; eſpecially the wriſts, ſhoulders, and knees, and all up the fleſhy parts of the arms and thighs: theſe pains generally fly from place to place, and leave a ſwelling and redneſs in the parts laſt affected. Sometimes one part is quite free from pain, while another is attacked; at other times, many parts are ſeized nearly at the ſame inſtant, and we ſhall ſometimes ſee every joint affected at once. In this caſe the patients are in a very diſtreſſed ſituation, being incapable of moving, and dreading the aſſiſtance of the attendants, as they can ſcarcely admit of being touched without a ſenſible aggravation of the pains; and moreover are unable to bear even the weight of the bed-clothes, which muſt be arched over the limbs by proper contrivances.

The diſtemper, however, is often leſs violent, the fever being but moderate, and ceaſing entirely when

when the pain begins, which is alſo confined to one or two places.

When called to a rheumatic caſe, we are to regulate our conduct according to the ſtage in which we find the diſeaſe: if recent, and the fever ſtill high, we are to bleed; and if the patient be of a full habit, and in the prime of life, repeat it at proper intervals, to two, three, or perhaps four times, according to the ſtate of the pulſe, and violence of the fever, which are always to be our guides, and not the appearance of the blood; for the blood is found to throw up to the ſurface the ſame kind of whitiſh ſcum, or inflammatory cruſt, that is found in the pleuriſy and other inflammatory diſeaſes, though not ſo viſcid. Hence Sydenham and others have conſidered the rheumatiſm as a true inflammation, and treated it accordingly, depending chiefly on repeated bleedings. And ſome people direct theſe to be repeated till the cruſt ſhall diſappear; but it has been already mentioned, that this is a rule we are never to be governed by, but always regulate our bleedings by the ſtrength of the pulſe, and by the apparent relief that they ſeem to give. Therefore, in the rheumatiſm, if the patient is free from fever, or of a delicate frame, and if we find the pulſe begins to ſink, notwithſtanding the pains increaſe, we muſt withhold the lancet, and have recourſe to ſome other means.

Immediately after having blooded the patient, if he be of an athletic habit, we may begin with nitre, and give it in as large quantities as the ſtomach will bear. Dr. Brockleſby ſays, that thin water-

water-gruel is the beſt vehicle, and he uſually diſſolved two drachms of nitre in a quart of gruel, which may be ſweetened, if the patient chuſes it, and a tea-cupful directed to be taken every ſecond hour. Wine-whey will, in general, be found a better vehicle; but if the ſtomach ſhould reject the nitre, then we muſt ſubſtitute a palatable ſaline julep, and give it in large doſes. But both the nitre and this julep will be rendered more efficacious by the addition of emetic tartar in a due proportion. Theſe things will ſeldom fail to keep the bowels open; but if they ſhould not, we muſt order clyſters to be thrown up from time to time; or, if theſe cannot be given, cream of tartar, ſal polychreſt, or Rochelle ſalt with manna.

While the pains are extremely violent, they admit of no application; but whenever it is practicable to convey warm ſteams to the affected parts, it ſhould be done; and when the patient can bear friction, we may direct a mixture of oil, vinegar, and ſpirit of hartſhorn, to be rubbed in warm, and the part afterwards covered over with flannel. A ſemicupium, or entire bath of warm water, after the requiſite bleedings, and emptying the inteſtines, frequently gives great relief. But we muſt always take care that the bath be not uſed until after ſufficient bleeding.

The patient's diet all this while muſt be of the thin vegetable kind; barley-gruel with currants, roaſted apples, and the like; freſh runnet-whey, or two-milk whey, is at the ſame time a grateful and a very proper drink; but when the fever begins to ſubſide, weak wine-whey may be allowed,

or

or muſtard-whey, made by adding an ounce of bruiſed muſtard-ſeed to a quart of boiling milk.

The pains are generally moſt ſevere toward evening, whence ſome people might be tempted to give opiates; but theſe muſt be carefully avoided while the fever is high, as they will only aggravate and prolong the diſeaſe.

The matter which creates the rheumatiſm is beſt carried off by the ſkin; and for this reaſon, as the courſe directed is all of the diaphoretic kind, it will facilitate the cure, if the patients lie in blankets, preferably to linen ſheets.

But the offenſive particles ſometimes paſs off by a diarrhœa, or by turbid urine, which lets fall a large quantity of yellowiſh ſediment.

It happens alſo, though but very ſeldom, that the criſis in an acute rheumatiſm is made by depoſiting a ſharp humour on the legs, where it forms a number of little bliſters, which terminate in ulcers, that ought not to be dried up too haſtily.

If by any of theſe means the pain ſhould wear off, and the fever ſubſide, the patients muſt be put on a more ſubſtantial diet; and, in order to diſſipate the remainder of the rheumatic acrimony, we are to direct a light decoction of guaiacum, with ſaſſafras and liquorice, to be taken in bed, morning and evening.

But it frequently happens, that after the fever has gone off, the pains ſhall not only remain, but even increaſe in violence, and continue to torment the patient for many weeks, or perhaps months: here

here then we are to have recourſe to ſuch things as ſhall ſerve to attenuate, and diſſipate the acrid matter, which is lodged among the membranes of the tendinous and fleſhy parts. And in caſes where the pain is ſo violent as to hinder ſleep, we muſt from time to time give opiates, to procure a temporary relief; and in order to promote the cure at the ſame time that we lull the pain, the opium muſt be joined with ipecacoan, or emetic tartar, which renders it ſudorific. A mixture of equal parts elixir paregoricum, tinctura guaicina volatilis, and vinum antimoniale, anſwers extremely well on theſe occaſions; given, from one, to two tea-ſpoonfuls, in wine-whey, at bed-time.

The bark is alſo found ſerviceable in caſes where the pains are obſerved to intermit, and where the ſweatings in the beginning of the diſeaſe have been profuſe, and the urine has depoſited a ſediment; it may be given either in ſubſtance or decoction, according to the liking of the patient: but where there appears to be a coldneſs, and an uncommon viſcidity in the blood, with a remiſſneſs in the circulation, the reſin of guaiacum is the medicine on which we are to place our chief dependence.

The common ſpirituous tinctures of the ſhops are inconvenient forms for adminiſtering this reſin, as it always parts from the ſpirit the moment the tincture is diluted in any watery vehicle; therefore it will be beſt to order the proper doſe, of a ſcruple, or thereabouts, to be rubbed up with a little of the yolk of an egg, and diſſolved by that

means in an ounce or two of any pleaſant diſtilled water, to which we may add thirty or forty drops of the ſpiritus volatilis aromaticus, and a drachm or two of ſyrup of ſaffron or orange-peel; the whole making a draught to be taken at bed-time.

But a ſtill more elegant way of adminiſtering this reſin is, by diſſolving it in lime-water, by the addition of quick-lime: the reſin and quick-lime, equal parts, are to be rubbed together, then the lime-water poured on, and when the mixture has ſtood till it becomes fine, filter the clear tincture. The volatile aromatic ſpirit may be added in due proportion to this ſolution, and then it makes an elegant volatile tincture of guaiacum, which mixes in any watery vehicle. Or, the reſin may be diſſolved in æther, in the ſame proportion as directed in the London Diſpenſatory for making the volatile tincture: this conſtitutes a moſt penetrating medicine, and has been found very efficacious; the doſe is from thirty, to ſixty drops, dropt on a lump of ſugar, and this diſſolved in ſome agreeable vehicle.

So much for the acute ſpecies of rheumatiſm. The *chronic* is moſtly found to invade people who are rather advanced in life; the pain ſeldom attacks ſo many places at a time as in the acute ſpecies, neither are the parts affected ſo liable to become red or ſwoln.

Repeated bleedings in theſe caſes are improper; but bliſtering is often of great uſe, and they require frequent purging, and ſudorifics, ſuch as have been juſt now directed. It is of ſervice to add

add reſin of guaiacum to the cathartics; and opiates may be given with ſafety, when the pains are ſo ſevere as to hinder the patients from getting the neceſſary proportion of ſleep. Nothing anſwers better to ſecure againſt relapſes of the chronic rheumatiſm, than wearing a flannel ſhirt, which is alſo of uſe, in ſome inſtances, to alleviate the pains and ſhorten the diſeaſe.

In theſe chronic caſes, topical applications are ſometimes found to be of uſe; ſuch as rubbing with equal parts of the volatile and ſoap-liniments; and laying plaſters to places where the pain is fixed, compounded of the gum and ſoap-plaſters, with a little of the emplaſtrum veſicatorium: obſtinate rheumatic caſes will require change of climate, and the uſe of the natural hot baths; and in perſons not too far advanced in life, the cold bath is an excellent preſervative againſt returns of the rheumatiſm.

Both the acute and chronic ſpecies of rheumatiſm are liable to be complicated with other complaints, which render it neceſſary to diſtinguiſh ſome varieties of the diſeaſe.

1. *Rheumatiſmus dyſentericus.* There are caſes wherein the morbific matter has been obſerved, by turns, to affect the inteſtines with ſevere griping and violent purging, and the fleſhy parts of the body with acute pains: when the belly is at eaſe, the limbs are excruciated with pains; when theſe abate, then the griping and purging begin, and thus go on tormenting and exhauſting the patient for weeks in ſucceſſion. The method of

treatment which ſucceeded in a caſe of this ſort was, ſmall doſes of ipecacoan with opium, mild doſes of rhubarb being occaſionally interpoſed; but the recovery was ſlow, and not complete, until the warmth of the ſummer months came in to the phyſician's aid.

2. *Rheumatiſmus arthriticus*; when the pains occupy the joints, and at the ſame time ſpread to the fleſhy parts, ſo that it is hard to ſay whether the diſeaſe be gout or rheumatiſm. Theſe caſes particularly require, and ſeldom yield to any thing but the natural hot baths.

3. *Rheumatiſmus ſcorbuticus*; which affects people who have ſuffered from the putrid ſcurvy, and been long confined to garriſons, or at ſea. Courſes of goat's whey, or of common whey mixed with freſh vegetable juices; new brewed ſpruce-beer, or freſh infuſion of malt, taken in the way that ſhall be mentioned hereafter, with vapour-bathing, are the moſt likely means of eſtabliſhing health in theſe circumſtances. The looſe rotten gums, ſwelled legs, and livid ſpots, will ſerve to diſtinguiſh the ſcorbutic rheumatiſm.

4. *Rheumatiſmus ſyphiliticus*. When there is reaſon to believe that there is a complication of venereal virus with the rheumatic acrimony, the uſe of vapour-baths, and a courſe of mercurials, combined with ſome convenient preparation of antimony, together with the decoction of ſarſaparilla, will bid fair to eradicate the diſeaſe.

5. *Rheu-*

5. *Rheumatiſmus hyſtericus.* When pains of the rheumatic kind diſtreſs perſons of the hyſteric temperament, the cold bath, and a courſe of the cortex macerated in lime-water, as before directed, will be found the moſt likely means of giving more ſtrength to the ſolid texture, and abating the extraordinary degree of ſenſibility.

The ſmall of the back is the place where hyſteric people are moſt apt to feel ſevere pain.

We formerly mentioned the complication of the rheumatiſm with an intermittent fever, wherein there is alſo a neceſſity for giving the cortex.

The *lumbago*, or fixed pain in the ſmall of the back, and the *iſchias*, vulgarly termed Sciatica, or fixed pain in the hip, do not appear to be diſtinct genera, but may be conſidered as ſpecies of the rheumatiſm or gout: of both theſe there are ſeveral varieties; no leſs than ſeventeen of the lumbago, and eleven of the iſchias, being diſtinguiſhed by Sauvages.

LUMBAGO.—The *lumbago* may be confounded with the nephritis, or nephralgia, wherein the pain ariſes either from an inflammation of the kidney, or from ſtoney concretions lodged there; but in the two laſt-mentioned diſeaſes there is generally a nauſea or retching to vomit, and a numbneſs or uneaſy ſenſation all down the thigh; whereas in the true rheumatic lumbago the pain of the loins is not ſo attended, and there is a greater increaſe of pain upon ſtirring, or endeavouring

vouring to raiſe up the body, than when the caſe is nephritic.

When the lumbago partakes of the nature of an acute rheumatiſm, we muſt bleed repeatedly, give ſaline purges, and throw up clyſters, with turpentine diſſolved in the yolk of an egg; nitre will alſo be required, with plentiful dilution. But in caſes of the chronic kind, it will be proper to apply a ſtimulant plaſter to the ſmall of the back, or to rub the ſame part with volatile liniment, and alſo give a ſolution of the capivi, or Canada balſams.

SCIATICA.—The *ſciatica* ſometimes appears to belong, more to the gout than rheumatiſm; and in ſuch caſes the pain is more deeply ſeated than when it ariſes from rheumatic acrimony. The former is termed *Iſchias Arthritica*, the latter *Iſchias Rheumatica*; the treatment of both muſt be regulated according to what has been already laid down for the two primary diſeaſes. Bliſtering the thigh, or cutting an iſſue in the proper place, either above or below the knee, have been found to relieve the pain of the hip.

Dr. Fothergill finds that calomel in ſmall doſes, joined with ſudorifics, is remarkably efficacious in this diſeaſe, which generally baffles every other attempt to relieve the pain. He gives pills of one grain, and waſhes them down with a draught compoſed of ſome grateful diſtilled water, thirty drops of the vinum antimon. and twenty-five of tinctura thebaica; theſe are taken every night ſucceſſively for

for ten or twelve times; and if after that the pain does not abate, he increaſes the doſe of calomel to two grains, one night, and one the next, alternately as the pain wears off, the anodyne is gradually diſcontinued. He ſays that he has ſeldom met with a genuine ſciatica, that has not yielded to this proceſs, in the ſpace of a few weeks. See his paper in the 4th vol. Med. Obſervations, page 74.

It has ſometimes happened in caſes of inveterate ſciatica, that ſuch a flow of humours has fallen on the joint as to relax the ligamentum rotundum, which connects the femur with the ſocket; whence an imperfect or even complete luxation has enſued.

An abſceſs has alſo been known to form in the ſame place; and in lying-in women, who have a great flow of milk, if this be ſuddenly ſuppreſſed, there are caſes where a ſevere pain has begun in the groin, and ſpread itſelf to the hip, attended with an œdematous ſwelling of the leg and thigh. This diſeaſe has been already mentioned, and will be further conſidered in its proper place.

CHAP. III.

Of the Oſtocopus; its different Species.

THAT genus of painful diſeaſe termed Oſtocopus, is diſtinguiſhed into different ſpecies:

1. *Spina*

1. *Spina ventoſa*; when there is an eroſion of the internal perioſteum, and a corruption of the marrow in ſuch bones as thoſe of the thigh, leg, and arm.

The pain in theſe caſes is extremely ſevere, deep-ſeated, and the bone ſwells out; it is moſtly in ſcrofulous habits that this diſeaſe takes place. Amputation is generally the means of preſerving life; and this ought to be put in execution, before the ſtrength be too far exhauſted by the hectic fever, which always ſupervenes.

2. *Oſtocopus cancroſus*; when a cancerous acrimony ſettles in the veſſels of the perioſteum, bone, or marrow, in any particular place. In theſe caſes, the cicuta has ſometimes been found of ſervice; but, in general we are obliged to have recourſe to amputation, where the ſeat of the diſeaſe will admit this mode of relief.

3. *Oſtocopus ſyphiliticus*. The venereal virus is one of the moſt frequent cauſes of pain in the bones; and the caſe may be diſtinguiſhed from the oſtocopi which proceed from other cauſes, by the pain's raging moſt in the night ſeaſon, when the patient grows warm in bed. The method of cure will be laid down when we come to treat of the lues venerea.

4. *Oſtocopus ab oſteoſarcoſi*. In thoſe uncommon caſes wherein the bones loſe their natural ſolidity, the diſeaſe begins by ſevere deep-ſeated pains in the boney ſubſtance. There is no remedy yet known: but, as a prevalent acid appears to be the ſource

ſource of the diſeaſe, a courſe of lime-water, and other antacids, might be tried.

5. *Oſtocopus ſcorbuticus*; known by the diſtinguiſhing ſigns of the ſcurvy, which accompany the deep-ſeated pains. If curable, this ſpecies will probably yield to the courſes propoſed for the ſcorbutic rheumatiſm.

CHAP. V.

Of the Cephalalgia, or Head-ach; its different Species, and Methods of Treatment.

THE *dolores capitis*, when conſidered as primary diſeaſes, are diſtinguiſhed by Sauvages into three genera.

(1.) *Cephalalgia*; when the pain is rather dull, and accompanied with heavineſs, the head feeling as if it were turgid or over-loaden;

(2.) *Cephalæa*; when the pain is exceedingly acute, accompanied with a ſpaſmodic tenſion, and ſoreneſs of the teguments; and,

(3.) *Hemicrania*; when the pain occupies only a part, or half of the head.

But theſe diſtinctions are not of very much uſe in practice, as the principal differences, to which we are to attend, are, whether the pain depends on a plethora, and tendency to inflammation; on an arthritic or rheumatic acrimony; on an intermittent

tent fever; on a venereal taint: or whether it proceeds from foulneſs of the ſtomach, or ſome other affection of the nerves beſtowed on the alimentary canal. Let the generical name therefore be *Cephalalgia*, and diſtinguiſh it into the ſeveral ſpecies, of *plethorica*, *arthritica*, *rheumatica*, *intermittens*, *ſyphilitica* and *ſymphatica*.

When a head-ach depends on *plethora*, which may be known from the full pulſe, florid countenance, and heavineſs of the head, bleeding and ſubſequent purging will probably remove the pain; or if it ſhould not readily give way, we may apply cupping-glaſſes with ſcarification to the nape of the neck, and to the back part of the head.

Head-achs from an *arthritic*, or *rheumatic* humour, muſt be managed according to the principles already explained. When the complaint is found to depend on the dregs of an *intermittent* fever, we muſt have recourſe to the cortex, which will be improved by giving valerian along with it, and interpoſing emetics from time to time. If a *venereal* taint is found to be the cauſe, then mercurials muſt do the buſineſs; but when the head-ach is purely *nervous*, and depends on ſaburra, or other cauſes ſeated in the ſtomach or inteſtines, then, after having premiſed a gentle emetic, we muſt have recourſe to bitters and ſtomachic ſtrengtheners, and take eſpecial care that none of the diſcharges be ſuffered to fall ſhort, ſince nothing contributes more to bring on the pain than theſe ſuppreſſions, particularly coſtiveneſs; and for this reaſon, an aloetic pill, a ſpoonful of oleum ricini, a little

little lenitive electuary, or a few grains of rhubarb, muſt be given occaſionally, according to the circumſtances and conſtitution of the patient. Obſtruction of the menſes or of the piles, ſeldom fail to produce the head-ach; and therefore theſe diſcharges muſt, if poſſible, be again ſet free.

But there are many caſes of head-ach which invade periodically, and torment people for a number of years, for which it is impoſſible to aſſign any certain cauſe during the life of the patient.

Theſe periodical head-achs are ſeldom attended with immediate danger, but ſuch as are perpetual and violent, generally end in the apoplexy, ſome ſpecies of bad fever, or ſpaſmodic diſeaſe.

The diſſection of ſubjects who had been much afflicted with pains of the head, have ſhewn a variety of ſources to which they might be aſcribed, and which the reader may ſee in the obſervations of Morgagni and Lieutaud. In ſome, the ſutures of the ſcull were found to be ſo cloſed up as ſcarcely to ſhew any traces of the junction of the different bones of the cranium. In others, the dura mater was found thickened and indurated. In others, there were earthy concretions in this membrane. In others, the ſcull ſent out little proceſſes, like thorns running into the brain and its membranes; and in others, (which is ſtill more remarkable) crude mercury was found in the ventricles of the brain, and at the baſis of the ſcull, not only in ſubjects who had uſed mercurial frictions, but alſo in ſuch whoſe employments expoſed them to the vapour of that mineral, particularly gilders.

External

External applications will often give immediate relief in the head-ach, ſuch as Ward's eſſence; a little of this dropt into the palm of the hand, and applied to the forehead, will generally remove the pain for a time; and ſo will æther, when applied in the ſame way. People ſubject to head-achs ſhould make light ſuppers; they ſhould lie with the head high, and ſleep in thin night-caps, go to bed always with their feet warm, and well rubbed, and never ſuffer themſelves to grow coſtive.

CHAP. VI.

Of the different Species of Odontalgia, or Tooth-ach; Otalgia; and Proſopalgia.

THE *tooth-ach* often depends on a fluxion of acrid humour, but much oftener on a caries, deſtroying the enamel, and allowing the cold air, or the ſubſtances we eat and drink, to come in contact with the nerves that accompany the blood-veſſels which go to the inner-part of the tooth; though in ſome inſtances the tooth-ach appears to be merely ſympathetic, and as ſuch is frequently obſerved to torment hyſteric patients, and pregnant women.

We may conclude a tooth-ach to ariſe from the fluxion of acrid humour, when the teeth are all ſound, when the pain is not confined to any particular tooth, and when the gum is ſwelled and inflamed.

In

In the beginning, ſcarifying the gums, or applying leeches to them, will perhaps divert the humour, and abate the pain and inflammation; or, if theſe ſhould not anſwer, a bliſter behind the ear. But if the pain perſiſts, and the gum ſwells more and more, we may expect a ſuppuration; and to encourage this, ſhould direct a piece of toaſted fig, to be held between the gum and the cheek; and when it ſhall be found that the little abſceſs is ripe, we muſt open it, and apply pledgets dipt in honey of roſes, with ſome tincture of myrrh; and theſe muſt from time to time be renewed, in order to deterge, and heal up the ulcer.

When teeth become carious, the complaint is for the moſt part evident to the ſight; but we may be further aſſured by gently ſtriking the ſuſpected tooth with ſome hard inſtrument; if this ſhould raiſe a ſharp pain, we may conclude that the tooth is not ſound.

It is always beſt to extract rotten teeth, as they ſeldom fail to ſpread the corruption to thoſe that are ſound. Very often a carious tooth has been found to give riſe to ſwellings, and ulcerations on the chin, and about the cheeks, which will never diſperſe, nor heal up, till the rotten tooth be extracted.

When pains of the teeth are ſympathetic, they cannot be removed but by removing the cauſe which diſturbs and diſorders the nervous ſyſtem. If the ſymptom be merely hyſterical, its cure muſt depend on ſuch a courſe as that propoſed for the rheumatiſmus hyſtericus.

If

If it be a ſymptom of pregnancy, bleeding for the moſt part removes or alleviates this, and all other complaints ariſing from that ſource.

The different ſpecies of tooth-ach are denominated as follows, according to their ſeveral ſources and concomitant circumſtances:

1. *Odontalgia catarrhalis*; when the pain ariſes from a fluxion of acrid humour.

2. *Odontalgia carioſa*; when from rottenneſs of the tooth.

3. *Odontalgia ſcorbutica.*

4. *Odontalgia arthritica*; when the pain of the teeth alternates with that of the joints in gouty perſons.

5. *Odontalgia hyſterica.*

The *OTALGIA*—is a moſt ſevere diſeaſe; if it depends on inflammation it muſt be treated as before explained; if from living inſects, the moſt ready way to deſtroy them inſtantly, is, to blow in the ſmoke of tobacco, and afterwards pour in warm oil. If the pain ſhould be merely ſpaſmodic, or ariſe from a fluxion of acrid ſerum, then bliſtering or cupping the back of the head will bid fair to give relief; and at the ſame time we muſt put ſoft doſſils into the ear, dipt in oil of bitter almonds, with a little oleum ſuccini, and tinctura thebaica.

The ſpecies of otalgia are,

1. *Otalgia inflammatoria*; when there is a fulneſs of the habit, and tendency to inflammation.

2. *Otal-*

2. *Otalgia purulenta*; when there is an ulceration or purulent diſcharge from the ear, accompanied with ſevere pain.

3. *Otalgia verminoſa*; from inſects getting into the ear.

4. *Otalgia ab intruſis*; from hard bodies thruſt into the ear.

5. *Otalgia catarrhalis*; from a defluxion in conſequence of obſtructed perſpiration.

PROSOPALGIA.—That painful affection of the face, firſt deſcribed by Dr. Fothergill, (5th vol. Med. Obſervations, page 129) and to which we have ventured to give the name of *Proſopalgia*, is to be diſtinguiſhed from all thoſe pains that depend on carious teeth, and from that which has obtained the name of an ague, or rheumatiſm of the face, a diſorder as painful as it is frequent; this, though it is often connected with ſome faults in reſpect of the teeth, and the nerves diſtributed to them, for the moſt part has exacerbations that are regular as to time, like the fit of an ague; or the paroxyſms invade at night, as in the rheumatiſm. Theſe pains of the face are not uncommon among the younger women, of hyſterical habits, eſpecially when pregnant; but the true *proſopalgia* ſeems almoſt peculiar to women advanced in life: now and then, a caſe happens among men, and very lately, the author has been informed of a gentleman, in his ſixty-fourth year, who has, for ſixteen years paſt, been ſubject to attacks of this diſorder, two or three times in the year, at leaſt; he deſcribes the pain as being inſtantaneous, like the

the electric ſhock, and exceedingly acute while it laſts, which may be about a minute. He has no bad teeth, though he had a ſound one drawn fifteen years ago, in hopes it might have relieved him; and his health, in other reſpects, is as good as can reaſonably be expected for his time of life; he has tried a variety of things without effect; and it is intended to give him the cicuta, which Dr. Fothergill finds to be the only thing yet known to do ſervice in theſe caſes. In ſome of the female patients for whom he was conſulted, he could trace a cancerous acrimony, from indurated glands in different parts of the body, which leads him to infer, that the pain may ſometimes ariſe from a ſharp humour of this nature. See the Paper above-mentioned.

CHAP. VI.

Of the Pleurodyne, or Pain of the Side; its different Species, and Methods of Treatment.

THE *pleurodyne* is that pain in the breaſt which is diſtinct from the pleuriſy and peripneumony, as being unattended by febrile ſymptoms: of this there are different ſpecies; thoſe which are moſt likely to occur in practice are,

1. *Pleurodyne plethorica*, or baſtard pleuriſy. There is a pungent pain in the ſide, but not deeply ſeated, affecting only the intercoſtal muſcles; a cough, and difficulty of breathing, but without oppreſſion, diſturbance of the pulſe, or feveriſh heat. This complaint is uſually the conſequence

ſequence of catching cold, or of ſuppreſſed menſes. It is cured by bleeding, abſtinence, gentle diaphoretics, and the application of volatile liniment, or ſome warm cataplaſm; or, if theſe do not bring immediate relief, by bliſtering or cupping on the affected part.

2. *Pleurodyne flatulenta.* A moſt acute and ſudden pain ſtrikes through the ſide; it reſembles the cramp, both in its violence and duration, and generally goes off, before the patient has an opportunity of applying for medical aid. When it laſts ſo long as to require ſome application, a hot flannel with volatile liniment, or a flannel bag filled with hot ſalt, will ſeldom fail to remove the pain. In the mean while, there will be a neceſſity for giving the tinctura fœtida, or equal parts of tinctura fuliginis and valerianæ volatilis, in ſome convenient vehicle.

Since theſe ſtitches, as they are uſually termed, generally take their riſe from indigeſtion, the radical cure muſt be effected by the uſe of ſuch medicines as have power to ſtrengthen the ſtomach and other digeſtive organs, and prevent the accumulation of ſaburra.

3. *Pleurodyne à ſpaſmate*; when a pain of the ſide is occaſioned by a ſtrain, in lifting heavy weights or the like. Bleeding, emollient liniments, or relaxing fomentations, with gentle purging, are the remedies in theſe caſes.

4. *Pleurodyne parapleuritica*; that chronic pain of the ſide which remains after a pleuriſy, is gene-

rally owing to an adhesion of the lungs to the pleura.

5. *Pleurodyne verminosa.* Worms in the intestines sometimes occasion a pain in the side. This species will be discovered by adverting to the signs which peculiarly denote the presence of worms, and which have been already laid down, as also the methods of cure.

The *pleurodyne rheumatica*, *arthritica*, *syphilitica*, and *scorbutica*, are all symptomatical, and ought to be referred to the primary diseases.

CHAP. VII.

Different Species and Varieties of the Dolor Ventriculi, or Pain in the Stomach; and Methods of Treatment.

THERE are three species of the *Dolor Ventriculi.*

I. *Pyrosis*, heart-burning; a painful sensation, attended with heat, rising from the stomach up to the œsophagus, and sometimes into the fauces.

II. *Cardialgia*; an uneasy or painful sensation in the epigastric region, accompanied with oppression and faintishness.

III. *Gastrodynia*; a most acute pain in the region of the stomach, often accompanied with a swelling, but without that tendency to faint as in the cardialgia, and without any symptoms of fever as

as in the gaſtritis. Of each of theſe ſpecies there may be diſtinguiſhed ſeveral varieties; as, firſt, of the pyroſis.

1. *Pyroſis à ſaburra*; the common heart-burning, ariſing from ſaburra, either acid, rancid, or empyreumatic; the conſequence, for the moſt part, of exceſſes in eating or drinking: an emetic is the firſt ſtep toward a cure, and afterwards the magneſia alba, if it be an acid that offends. In the pyroſis from rancid or empyreumatic ſaburra, the cure is ſeldom perfected without the aid of mineral waters of different kinds, ſuch as may happen to ſuit the taſte and convenience of the patients; it being difficult to ſettle abſolutely which water will anſwer beſt, until trial ſhall be made how they agree with the ſtomach. The Vahls, Seltzer, Bath, Harrowgate, Lucan, or Swadlinbar, are thoſe which are moſt commonly preſcribed, according to the various circumſtances. The food in all theſe caſes ought to be plain, and light of digeſtion, without fat, or greaſy high-ſeaſoned ſauces.

2. *Pyroſis bilioſa.* When a heart-burning ariſes from a ſharpneſs or exuberance of bile, emetics will be firſt neceſſary to diſcharge the offenſive fluid; and, as a prophylactic remedy, nothing anſwers better than drinking a pint of cold ſpring water every morning faſting. See further under the articles of Gaſtrodynia bilioſa, and Bilious Colic.

3. *Pyroſis ulceroſa.* If there be any excoriation or ulceration of the ſtomach, the pain will be con-

ſtant, but greatly exaſperated on ſwallowing any thing hot or acrid. In ſuch caſes, a diet entirely of milk will perhaps be the beſt remedy.

The varieties of the cardialgia are,

1. *Cardialgia ſaburralis.* This will be diſtinguiſhed by the foulneſs of the tongue, and frequent eructations of a diſagreeable flavour, weight at the ſtomach, and loſs of appetite. The cure is to be conducted on the like principles with that laid down for the pyroſis vulgaris.

2. *Cardialgia à veneno.* When it is known that any poiſonous ſubſtance has been the cauſe of diſtreſſing ſymptoms, we are to proceed as formerly directed in caſes of the gaſtritis à veneno; namely, to bring up as much as poſſible of the offending matter by an emetic, and afterwards fill the whole alimentary canal with chicken or veal-broth, milk, freſh-butter melted, or ſweet oil, giving them largely both ways, by the mouth and in clyſters.

3. *Cardialgia ſputatoria*; when the ſymptoms peculiar to the cardialgia are attended with a plentiful diſcharge of clear lymph, like ſaliva; ſometimes inſipid, at others acrid, and which comes up at intervals, to the quantity of a pint or more from the ſtomach. This is deſcribed by Linnæus as a frequent diſeaſe among the inhabitants of the northern parts of Sweden. It is alſo known in theſe countries; in Scotland, and the north of Ireland, the common people call this complaint the Water-Braſh. A tincture of the cortex in lime-water will probably be found to do ſervice.

4. *Car-*

4. *Cardialgia ex lenta concoctione*, ſeu *bradypepta*; when the muſcular fibres of the ſtomach ſo far loſe their tone, that they want ſtrength to propel the food, whence it remains in this place longer than is conſiſtent with health. This diſeaſe is the natural conſequence of repeated exceſſes in eating or drinking, and is not to be cured but by returning to a temperate courſe of life. The vinum amarum, and acid elixir of vitriol, or, where acids do not agree, the ſweet elixir, will generally be found to do ſervice. If coſtiveneſs attends, a mixture of the elixir aloes with that of vitriol, will bid fair to give relief, and may be taken to the proper quantity, in a convenient vehicle. Riding is of great uſe in theſe caſes, but taking a voyage to ſea would perhaps be ſtill more effectual. The Bath water is alſo particularly well adapted, if there be no ſymptoms of hectic fever attending.

5. *Cardialgia arthritica*; when the gout, having left the extremities, ſeizes the ſtomach. The methods to be purſued in order to obtain relief have been already mentioned.

6. *Cardialgia verminoſa*. Worms are not an unfrequent cauſe of the cardialgia, eſpecially the tænia. For the ſigns and methods of cure, the reader is referred back to the tabes verminoſa.

The varieties of the *gaſtrodynia* are,

1. *Gaſtrodynia ab ingluvie*; pain in the ſtomach, from a ſurfeit. This will be known by enquiring into the circumſtances preceding the complaints. The pain is not ſo exceſſive as when the ſtomach is ſimply over-diſtended with flatus. Immediate vomiting

miting muſt be excited, and the ſtomach well waſhed, by drinking plentifully of camomile-tea. White vitriol being a ſubſtance that vomits more ſpeedily than either ipecacoan, or any antimonial preparation, in doſes from eight to ſixteen grains, will be the beſt emetic in caſes of ſurfeit. After every thing has been thrown off, if ſickneſs or weakneſs of the ſtomach ſhould remain, the acid elixir of vitriol in ſome proper vehicle will reſtore the appetite and brace up the over-diſtended fibres. Ices, in ſuch circumſtances, would be both grateful and uſeful.

2. *Gaſtrodynia flatulenta.* When wind is pent up in the ſtomach, ſo as to over-diſtend and diſtract the ſenſible fibres, there is a moſt acute pain in the epigaſtric region, accompanied with a ſenſation as if the ſtomach were contracted; the breathing is rendered difficult, except when the patient leans forward; the pulſe is ſmall and depreſſed, the extremities grow cold, and there is a great degree of ſtraitneſs about the præcordia; nevertheleſs, the patient can bear preſſure on the pit of the ſtomach, which diſtinguiſhes this variety of gaſtrodynia from the gaſtritis, and from the gaſtrodynia bilioſa and hyſterica: when wind is diſcharged, the patient finds immediate relief, which may be held as another pathognomonic ſign. A glaſs of ſtrong peppermint-water will generally procure eaſe; but as theſe caſes are uſually attended with coſtiveneſs, we are not to expect permanent relief until this complaint ſhall be removed; therefore, a ſharp clyſter is to be immediately injected; and, after

its

its operation, we muſt have recourſe to opiates. If there be ſigns of plethora, it will be neceſſary to bleed; and the patient, in order to prevent relapſes, ſhould uſe ſtomachic bitters, abſtain from all kinds of crude flatulent vegetables, and be particularly careful that the bowels be kept ſufficiently open.

3. *Gaſtrodynia bilioſa.* The pain is here ſuppoſed to proceed from an exuberance of acrid bile; it is extremely acute, and accompanied with a vomiting of ſharp greeniſh fluid; there is extreme weakneſs, and great dejection of mind, and ſuch a tenderneſs at the pit of the ſtomach, that the patient cannot bear the leaſt preſſure on this part: this aſſemblage of ſymptoms often happens in women, and then the diſeaſe is generally conſidered as hyſterical. The vomiting is to be encouraged, by drinking freely of weak chicken-broth, until the ſtomach ſhall be thoroughly cleared, and then we are to have recourſe to opiates: pills of ſolid opium, of a half, three quarters, or a whole grain, according to the exigencies of the caſe, and age or ſex of the patient, are preferable to the tinctura thebaica; and if the ſtomach ſhould reject them, the doſe of opiate muſt be given in clyſters.

4. *Gaſtrodynia à veneno.* To what has been already ſaid concerning the effects of poiſon, we ſhall add the following remarks; as they may be of uſe in aſſiſting magiſtrates, to detect people who have been guilty of poiſoning: and may alſo guide medical perſons in forming an opinion, when required to give it in evidence, on trials for this crime.

When

When the poiſon ſwallowed has been of the moſt acrid kind, ſuch as corroſive ſublimate, or any of the ſtrong mineral acids, the fauces and mouth cannot fail of being excoriated or ulcerated, and then theſe appearances will leave no doubt of the reality of the poiſoning; but when theſe external marks are wanting, there will be reaſon to ſuſpend our judgment until a ſufficiency of other circumſtances ſhall clear up the matter.

After death, the appearances on opening the body will ſerve, in great meaſure, as guides to direct the opinion. But we are to be cautious even here, and conſider that the eroſion of the coats of the ſtomach, and the livid or mortified ſpots are not of themſelves ſufficient proofs of poiſon, ſince theſe may proceed from internal cauſes, and therefore it is proper to examine the contents of the ſtomach.

It is a good method, to ſoak a piece of bread in the liquid matters found here, and give it to a dog, and form a concluſion from the effects it has on this animal.

But if a white powder ſhould be found in the ſtomach, incloſe it, by the means of a piece of wire, between two plates of clean copper, and put theſe into the fire; after they have been made red hot, the copper will become white, when cold, if the ſubſtance incloſed was arſenic.

5. *Gaſtrodynia à xiphoide.* The point of the cartilago enſiformis is ſometimes ſo depreſſed as to excite the ſymptoms of a cardialgia or gaſtrodynia.

In

in this caſe it has been recommended to apply cupping-glaſſes, with a view to raiſe the cartilage; but this ſcheme does not ſeem to promiſe much ſucceſs.

6. *Gaſtrodynia ab extraneis.* When hard indiſſoluble ſubſtances are ſwallowed and remain in the ſtomach, they generally, though not always, give riſe to pain, ſickneſs, and other diſtreſſing ſymptoms.

CHAP. VIII.

Of the different Species of Colic, and Methods of Treatment.

THOSE internal pains that are felt in the abdomen, chiefly about the umbilical and hypochondriac regions, and which are uſually accompanied with coſtiveneſs, are termed in general *Colic.*

It is ſeldom poſſible to determine the preciſe ſeat of the diſeaſe in theſe caſes, or to ſay exactly which is the part affected, on account of the various windings of the inteſtines, and their contiguity to the different abdominal viſcera.

It is proper to diſtinguiſh at leaſt five ſpecies of colic:

(1.) *Colica flatulenta*; or windy Colic. When the pain ariſes from flatus, pent up in ſome part of the inteſtinal tube, without any degree of inflammation, or ſigns which denote faults in reſpect of the bile.

(2.) *Colica*

(2.) *Colica inflammatoria*; the inflammatory Colic. When from the tenſion of the abdomen, and its ſoreneſs to the touch, together with heat, thirſt, and a quick pulſe, we infer that there is ſome degree of inflammation.

(3.) *Colica biliosa*; the bilious Colic. When the colic-pain is accompanied with vomiting of bile, or followed by a yellowneſs of the ſkin.

(4.) *Ileus*, ſeu *paſſio iliaca*; the iliac paſſion; when the vomiting, accompanied with obſtinate conſtipation, is of ſuch continuance, and the matters thrown up are of ſuch a nature, as to give reaſon to conclude that the paſſage downwards through the inteſtines is entirely cloſed up.

(5.) *Colica nervoſa*; the nervous Colic. When a moſt excruciating pain in the umbilical region, ſtriking through to the back, is accompanied with the moſt obſtinate coſtiveneſs, and a retraction of the navel, and ſucceeded by a ſpaſmodic contraction, or palſy of the lower extremities.

Colica flatulenta.

We ſhall know the *windy Colic* by attending to the following circumſtances: Diſcharges of flatus or feculent matters downwards, always give relief. The pain uſually ſhifts about, and follows the track of the colon, and conſequently croſſes the epigaſtric region, whence it often inclines one to believe the ſtomach to be the ſeat of the diſeaſe. The pain is not exaſperated by preſſure, but rather relieved; as rubbing the belly ſometimes promotes the

the expulſion of flatus, and haſtens diſcharges by ſtool. There is no extraordinary thirſt, and the pulſe but little diſturbed.

There is always ſuch a portion of elaſtic vapour contained in the ſtomach and inteſtines, as ſerves to diſtend them; but in a moderate degree, as long as it has liberty to ſpread itſelf throughout the whole extent of the canal; but when a ſtop is put to the equable diffuſion of this flatulent matter, whether it be by an obſtruction or a conſtriction, then immediately the flatus which is ſo confined begins to expand itſelf, and ſoon comes to over-diſtend the ſenſible fibres.

This over-diſtenſion, beſide the pain which it occaſions, will impede, or perhaps altogether ſuſpend the periſtaltic motion; and conſequently the contents of the inteſtines will not be propelled as they naturally ought to be: hence the coſtiveneſs which always attends the colic pain. But in ſome caſes it appears, that the periſtaltic motion is even inverted, ſo as to force the various contents of both the ſmaller and larger inteſtines up into the ſtomach, from whence they are ejected by violent vomiting.

Though every part of the alimentary canal is liable to conſtriction or obſtruction, yet the moſt common places for the interception of flatus, are the upper orifice of the ſtomach; the pylorus; the lower part of the duodenum; the valve of the colon; and its flexure, where it turns up under the falſe ribs on the left ſide.

But

But the great difficulty is, to know, in any given caſe, the particular cauſe of the conſtriction or obſtruction, ſince either may ariſe from various ſources; as acrid bile; different kinds of ſaburra; ſtoppages of the ductus communis, from ſpaſm, or from biliary concretions; hardened fæces; worms; ruptures; remains of undiſſolved food; earthy or ſtoney concretions lodged in the inteſtines; compreſſion of the inteſtines from tumors in any of the contiguous viſcera; intro-ſuſception or volvulus of the inteſtine; a thickening of the coats of the inteſtine from ſcirrhus or cancer, &c. Moſt of theſe can only be gueſſed at; and hence the great neceſſity for making the ſtricteſt inquiry into every circumſtance relative to the patient's conſtitution, and conduct in reſpect of the non-naturals, previous to the attack of the diſeaſe.

The indications of cure in all theſe caſes of colic are, to take off the ſtricture, and remove every obſtruction to the free paſſage of matters downwards; ſo that the elaſtic vapour may be reſtored to its original liberty of diffuſing itſelf.

In full conſtitutions, with ſtrong fibres, it is always proper to take away ſome blood, whether there be evidences of actual inflammation, or not; and this, in order to leſſen the danger of one's ſupervening. In the next place we are to order a common clyſter to be injected, which, in the ſlighter degrees of flatulent colic, will generally be found to procure a ſtool or two, and remove the pain: but if one injection ſhould not excite the proper diſcharge,

charge, nor abate the pain, we muſt try the effects of a ſecond; and, to make it more active, boil up (towards the end *) ſome ſena or colycinth in the decoction, and add oil, honey, and common ſalt; or, which is better, crude ſal ammoniac: if none of theſe anſwer, we are then to have recourſe to remedies by the mouth. The oleum ricini, mixt with a ſpoonful of ſweet white-wine, brandy, or pleaſant ſpirituous water, will generally be found to purge, and uſually abates the pain, even before the ſtools are procured; or, inſtead of this, a ſolution of manna and Rochelle ſalt, mixed with oil of ſweet almonds, and quickened with tincture of ſena or tinctura ſacra. If liquids will not lie on the ſtomach, we muſt try pills or boluſes, made up of ſome of the briſker cathartics; ſcammony generally anſwers well, and may be formed into pills of five or ſix grains; one to be taken every hour till they produce the deſired effect. It will be neceſſary, when the pain is extremely ſevere, to join opium with the purgatives, and to ſtupe the belly; or apply bags filled with common ſalt, or oats heated; or, where there are ſuſpicions of inflammation, the common ſal catharticum amarum, diſſolved in a large quantity of warm water, and taken gradually, is ſtrongly recommended by Sir John Pringle as preferable to any other purgative.

It ſhould be a general rule in all colic caſes, to make particular inquiry concerning ruptures: in women who have born a number of children, the inteſtine

* Long boiling deſtroys the purgative quality of ſena.

inteſtine is apt to puſh out at the navel, or in different parts of the parietes of the abdomen, but in other ſubjects, the groin is the moſt likely place to find a hernia.

Colica inflammatoria.

The *inflammatory colic* only differs in degree from the enteritis, formerly treated of, and requires repeated bleeding according to the urgency of the ſymptoms, and fulneſs of the patient's conſtitution; together with the clyſters, and other means already mentioned, in order to procure a free paſſage by ſtool. To which we muſt add, the warm bath, when the other remedies do not take effect.

If by any of the foregoing means a purging can be brought on, it is to be encouraged by drinking freely of broth, ſeaſoned with Rochelle ſalt, and at bed-time let an opiate be given; but if no ſtools have been procured, and the ſevere pain ſtill continues, we muſt try more active cathartics than thoſe already mentioned; the extractum catharticum, joined with calomel and opium in due proportions, and made into pills, to be taken along with the liquid purges, will probably anſwer; if they ſhould not, it is uſual to give crude quickſilver in large quantities, * or to make the patient ſwallow leaden bullets; as theſe, by their weight, may poſſibly force through the conſtricted or obſtructed part of the inteſtine. Another method, which has ſometimes been found ſucceſsful,

* Two or three ounces may be ſwallowed in a little broth every ſecond hour.

ſucceſsful, is, to take the patient out of bed, and daſh cold water on the lower extremities, while he ſtands on a cold flag bare-footed. In deſperate caſes, it is alſo uſual to try the effects of tobacco-clyſters; either boiling a drachm of two of the leaves in the common clyſters, or blowing the ſmoke into the rectum by means of a proper inſtrument.

When we are ſucceſsful in procuring eaſe, and bringing on a purging, the patient will ſoon recover, but not all at once; and therefore there will be a neceſſity, for ſome days, to continue the uſe of the gentle cathartics, and of the opiates at night, until the ſoreneſs, and all ſenſe of fulneſs and tenſion, ſhall be entirely gone, and until it ſhall appear from the ſtools (which in theſe caſes are always to be inſpected at every viſit) that all remains of hardened fæces are carried off, and the paſſage perfectly free.

In order to prevent relapſes, nothing is of ſo much ſervice as riding; and the patient ſhould carefully abſtain from crude flatulent vegetables, and from fleſh-meats of hard digeſtion, and ſhould never allow coſtiveneſs to take place; but always, when Nature is deficient in this reſpect, have recourſe to ſome gentle cathartic.

Colica bilioſa.

The *bilious colic* is particularly diſtreſſing on account of the vomiting, which is oftentimes very difficult to reſtrain. The antiemetic draughts, formerly mentioned, muſt be tried; a proper quantity

tity of tinctura thebaica, or of theriaca andromachi, or mithridate, muſt be given in the clyſters; the patient muſt be put into a warm bath, and continued there, as long as it can be borne with pleaſure; a cataplaſm of mithridate may be laid on the pit of the ſtomach; the leaves of common garden mint boiled in claret, and applied to the ſame part, and to the wriſts, have been known to anſwer, when many other things have failed, to ſtop a vomiting.

The bilious colic is more apt to return than any other ſpecies; and the patients, before they can obtain a radical cure, are generally obliged to have recourſe to ſuch waters as thoſe of Bath, Aix-la-Chapelle, or Bareges; but when people cannot avail themſelves of theſe ſalutary ſprings, they muſt be contented to try the effects of a compoſition of the aperient gums, with ſoap, flores martiales, and aloes or rhubarb, joined to a courſe of Seltzer, Vahls, or ſome ſulphureo-chalybeate water. (See further in Chap. III. Book IX. on the jaundice.)

Paſſio iliaca.

The *iliac paſſion*, is conſidered by Sauvages as a diſtinct genus from the colic; and placed, rather improperly, among the alvine fluxes. But as the methods of treatment for the ileus are to be conducted preciſely on the ſame principles as in the caſes of flatulent, inflammatory, or bilious colic, it would be a needleſs multiplication of diſtinctions,

ons, to look on this diſeaſe as any other than a ſpecies of colic; we therefore hold it as ſuch.

The ſtoppage of the paſſage downwards may happen from various cauſes; and hence we may, if we pleaſe, diſtinguiſh a number of varieties of the iliac paſſion; but as it is ſeldom poſſible, in the living ſubject, to diſcover the preciſe nature of theſe obſtructions, ſuch diſtinctions are of little or no uſe in practice, and therefore omitted.

For let the original cauſe of the ſtoppage be what it will, if not very ſpeedily removed, an inflammation will ſupervene; and it will be next to a miracle if a mortification does not ſucceed: the ſigns of which have been already pointed out, when treating of the enteritis. *

Colica nervoſa.

Though the foregoing ſpecies of colic are ſufficiently diſtreſſing and dangerous, yet none of them are attended with ſuch excruciating pain as the *nervous colic*.

This diſeaſe is endemic in ſome countries, and uſually charged to the too frequent uſe of auſtere acid drinks, or to an accidental mixture of lead with the liquors which are in daily uſe.

* In ſome caſes, the inflammation, and mortification take place but ſlowly: a few years ago, a lady, naturally of a very delicate frame, was known to hold out, between ſix and ſeven weeks, after the paſſage through the colon had been completely ſhut up by a thickening of the coats of that inteſtine; ſo that nothing paſſed downwards during the moſt part of the time.

The principal ſeat of the pain ſeems to be the center of the meſentery; the navel ſinks in, and the inteſtines are ſo drawn toward the ſpine, that it has ſometimes been found impracticable to force up clyſters.

The violent pain generally holds five or ſix days, though it will ſometimes run out to twelve or fourteen, and prove ſo exceedingly tormenting as to throw the unhappy patients into deſpair; and yet, what is remarkable, the pulſe all the while ſhall ſeldom be found quicker than in health, ſometimes rather ſlower; which ſhews, that in this diſeaſe the motions of the vaſcular ſyſtem are but little diſturbed: the ſame circumſtance however is often obſervable in the bilious colic.

Before the diſorder is confirmed, it may poſſibly be removed by the injection of clyſters, made of a decoction of colocynth, ſena, and carminative ſeeds, in which either common ſalt or crude ſal ammoniac have been diſſolved, and a proper quantity of oil mixed, eſpecially the oleum ricini: and, after the inteſtines are partly unloaden, the belly is to be kept open by the milder laxatives, of which the oil above-mentioned is one of the moſt effectual; the patient is to guard againſt catching cold, and be particularly cautious in regard of diet, leſt any thing acrid or indigeſtible be taken into the ſtomach.

But the phyſician's aid is ſeldom required, till the diſeaſe is in what may be termed, its Second Stage, when a conſtant vomiting of green bile uſually attends. The firſt thing to be done in theſe

theſe circumſtances is, to encourage the diſcharge of this acrid bile by drinking freely of thin broth; after that, we are to endeavour to bring off the hardened fæces by the repeated injection of purging clyſters, and then, if poſſible, procure eaſe from the pain by giving opiates in large and repeated doſes, and by putting the patient into a warm bath, if it may be had, or at leaſt, a ſemicupium, or fomenting the belly with emollient decoctions. Bliſtering on the navel has been found to eaſe the pain; but ſuch practitioners as have had moſt opportunities of ſeeing the nervous colic, fairly confeſs, that they are ſeldom able to ſucceed in relieving their patients, who generally ſink under the diſeaſe; or, if they ſurvive the painful period, are for a long time rendered miſerable by the paralytic weakneſs which enſues.

The nervous colic is a frequent diſeaſe in the Weſt-Indies, where it is termed the Dry Belly-Ach. Dr. Town who practiſed in the Iſlands, deſcribes it as the moſt dreadful of all torments. He lays down the uſual ſcheme of management. But Dr. Chalmers of Charleſtown in South Carolina has lately favoured the public with an Eſſay, in the American Magazine for July 1769, wherein he has communicated a method of cure, which for ſome time had been kept a ſecret by a family at Charleſtown; and which is ſaid to remove the diſeaſe ſpeedily, and ſo effectually, that it ſeldom returns, unleſs the conſtitution has before been greatly ſhattered by repeated attacks.

In the firſt place, bleeding is enjoined; then an ounce of colocynth, two drachms of ſena, and half a handful of aniſe-ſeeds, with as much common ſalt, are to be boiled in a proper quantity of water, to give twelve ounces of ſtrained decoction, to which oil and honey, or molaſſes, are to be added, ſufficient to make a clyſter: this is to be immediately injected, and repeated a ſecond or a third time, at the diſtance of half an hour, till a ſtool be procured. If the pain continues after this, a clyſter is to be given, of twelve ounces of warm milk, with ſix grains of opium diſſolved, or a decoction of the white poppy-heads in milk, which anſwers inſtead of the opium. On the following morning, the patient is to begin with a ſolution of blue vitriol in water, in the proportion of one grain to an ounce; of this, from two to three ſpoonfuls are to be taken faſting; if the firſt does not bring on vomiting, it is to be repeated every half hour till it operates; next morning the vitriol is to be taken again, and ſo on for nine days ſucceſſively. For the firſt four or five days, much green ſharp bile is uſually diſcharged both ways, but this leſſens by degrees; and before the courſe is ended, the medicine has little other effect than raiſing ſome degree of nauſea, and promoting a few yellow ſtools, or perhaps not moving the patient at all. During this interval, the diet is to be broth, gruel, and panado; but about the ſeventh or eighth day, thoſe who are impatient of ſuch thin diet are allowed bread and boiled chicken, and ſometimes a little rum well diluted with water; but all fermented drinks and acids are ſtrictly forbidden. By degrees the patients

tients return to their accuſtomed way of living, only taking care to abſtain for ſome time from ſour punch.

If a pain of the ſtomach ſhould remain, the patient is to be purged with rhubarb, and a plaſter of galbanum is directed to be worn over the part affected.

It does not clearly appear that Dr. Chalmers, at the time of publiſhing his Eſſay, had himſelf practiſed in this way, but he ſpeaks of it as an eſtabliſhed method in thoſe parts. The quantity of opium in the clyſter, appears rather too large to begin with, though in caſes of ſuch violent pain, as well as in thoſe of violent ſpaſm, it is well known that this medicine may be given ſafely in doſes, which at other times would be productive of very alarming effects.

At firſt view alſo, one is apt to be ſtartled at the propoſal of ſuch a harſh ſubſtance as blue vitriol, in a caſe where every thing acrid might reaſonably be expected to increaſe the diſtreſs; but if it acts ſo powerfully in diſcharging the ſharp bile, it may prove an efficacious remedy. Dr. Chalmers, in the Eſſay above-mentioned, relates a ſtory,* which (if he was not impoſed on) may ſerve to

* It is here tranſcribed.—" A woman had twenty purging " powders given her by an ignorant perſon in the country, " with directions to take one every third day, for the cure of a " carious ulcer on the tibia. Sixteen doſes being uſed without " the expected advantage, ſhe came to me, and produced the " four that remained, each of which contained about twenty-

" five

to ſhew that blue vitriol may be taken in very large doſes, without much hazard.

If the progreſs of the diſeaſe cannot be ſtopt, and the patient out-lives the painful period, the palſy which ſucceeds, is ſometimes removed, or at leaſt alleviated, by rubbing the limbs, and all down the ſpine, with a mixture of the petroleum Barbadenſe and ſtrong rum; the ſame petroleum, taken internally, is likewiſe ſaid to be of uſe, as alſo the Peruvian balſam. But if the ſtrength does not return ſpeedily in conſequence of theſe, the patient has little chance of recovery but from change of climate, taking a voyage to ſea, and then trying the natural hot baths.

As a prophylactic in the Weſt-Indies, and on the coaſt of Guinea, it has been found of great uſe to wear a flannel round the waiſt, and to drink infuſion of ginger by way of tea.

The nervous colic is termed *Rachialgia* by Sauvages, who makes it a diſtinct genus, and deſcribes eight different ſpecies; for theſe we refer the reader to the Noſologia Methodica, as well as for the different varieties of the other ſpecies of colic. If ſuch minute diſtinctions had been abſolutely neceſſary for eſtabliſhing the methods of cure, they ſhould have been inſerted here; for though they are

" five grains of blue vitriol, without any diſguiſe, and but " coarſely powdered, perhaps no unlucky circumſtance for the " patient. But though they always operated very roughly " both ways, her appetite was good on the intermediate days, " and her health but little or not at all impaired."

are extremely ſatisfactory, conſidered as hiſtories of diſeaſes, yet the limits of the preſent work will not allow us to introduce any, but thoſe which ſeem to promiſe ſome advantages in regard to practice.

The hyſteric colic is a diſeaſe peculiar to women, and as ſuch ſhall be reſerved for the third claſs.

The *hepatalgia*, or pain of the liver, and the *ſpenalgia*, or pain of the ſpleen, when independant of inflammation, are diſeaſes which it is hardly poſſible, during the life-time of the patient, to diſtinguiſh from ſome of the ſpecies of colic; and therefore, in general, theſe complaints will be confounded; neither is there much neceſſity for making diſtinctions, ſince the methods of treatment are much the ſame as in caſes of obſtinate bilious colic.

CHAP.

CHAP. IX.

Of the Nephralgia ; and Cyſtalgia ; vulgarly Stone, or Gravel.

THE *nephralgia* is, for the moſt part, owing either to ſtoney, or gravelly matter, irritating, or perhaps ulcerating the kidneys, and ureters.

A fixed pain in the ſmall of the back, generally to one ſide, very ſeldom in both ; a painful retraction of the teſticle of the affected ſide, and a numbneſs of the thigh ; an extreme degree of nauſea, or vomiting when the pain is moſt ſevere ; urine at firſt made in ſmall quantities, and watery ; afterwards diſcharged in abundance, turbid, hot, and oftentimes dark-coloured or bloody. Theſe are the ſigns of the *nephralgia calculoſa*, and ſhew that ſome ſtoney matter is lodged in the kidney, or working its way from thence along the ureter. This diſeaſe differs from the nephritis calculoſa, in nothing ſave its being unattended with febrile ſymptoms.

The ſigns of the *cyſtalgia calculoſa* are, pain in the bladder, eſpecially about the neck, and bloody urine in conſequence of riding, or being jolted in a carriage ; a ſenſe of weight in the perinæum ; an itchineſs of the glans penis ; ſlimey ſediment in the urine ; and frequent ſtoppages in making water. This differs as much from the cyſtitis, as the nephralgia does from the nephritis, and in the ſame way.

It

It is not eaſy to ſay, what the particular cauſes are, that occaſion the earthy particles of the fluids to run together, and form thoſe calculous concretions, which are found in different parts of the body, and eſpecially in the organs for ſtraining off, and diſcharging the urine.

The gout and ſtone are generally ſuppoſed to have ſome affinity, becauſe gouty people are for the moſt part afflicted with the gravel; but perhaps this is chiefly owing to their long confinement, and to the lying on the back, which people who labour under the gout are often obliged to ſubmit to; ſince the want of exerciſe and this poſture will naturally favour the ſtagnation of groſs matters in the kidneys: beſides, there are many inſtances of people ſeverely afflicted with the ſtone, for the greateſt part of a long life, who have never had the leaſt attack of the gout.

Whatever may be the particular cauſe of the diſpoſition to lithiaſis, the kidneys appear to be the moſt likely places for the earthy particles to concrete or run together, becauſe of the great quantity of blood which paſſes through the renal arteries, and which comes immediately from the heart, fraught with various newly received matters, that have not undergone much of the action of the veſſels, and therefore cannot as yet be ſuppoſed to be thoroughly aſſimilated.

Anatomiſts, who have carefully examined the kidneys in the human ſubject, particularly M. Bertin, inform us, that there are two ſets of tubuli uriniferi; the one continued directly from the extremities

tremities of the renal artery, and the other ſpringing from that veſicular texture, which is conſpicuous in the kidney.

It is in this veſicular part of the kidney, that we preſume the earthy particles firſt ſtagnate, and coaleſce; for it is hardly to be ſuppoſed, that ſuch ſolid matters could be allowed to ſtop in the extremities of the renal arteries, ſince the blood, and the urine ſeparated from it, muſt flow through theſe veſſels with great degrees of force and velocity; but in the intermediate veſiculæ the earthy particles may lie, and there, attracting each other, ſoon come to acquire ſenſible degrees of magnitude, and thus become ſand or gravel. As long as this ſand or gravel, formed in the veſicular part of the kidney, lies quiet, there will be no pain or uneaſineſs, until the concretions become large enough, to preſs either on the adjoining tubuli, or on the blood-veſſels; then a ſenſe of weight, and a kind of obtuſe pain in the loins will be felt. But when the ſmall pieces of earthy matter ſhall be diſlodged, and waſhed off by the force of the circulating fluids, or looſened by ſome ſpaſmodic action of the motory fibres in theſe parts, they will in their paſſage, create pain, raiſe different degrees of inflammation, or perhaps lacerate ſome blood-veſſels, and cauſe bloody urine. When theſe little earthy concretions happen to be detained in the pelvis of the kidney, or any other place where a a flow of urine continually paſſes, they ſoon increaſe in ſize, and become calculi, from the conſtant acceſſion of earthy particles, which are attracted by the

the original bit of ſand, which thus becomes the nucleus of a ſtone.

It is the paſſage of theſe calculi from the kidneys, down into the bladder, which occaſions the pain, vomiting, and other ſymptoms, that conſtitute what is uſually termed a Fit of the Gravel or Stone.

When an inflammation is actually raiſed, the diſeaſe is known by the name of Nephritis, and has been already treated of.

When ſymptoms like thoſe of a flatulent colic prevail, the diſeaſe will be called a Nephritic Colic, and requires to be treated with turpentine clyſters, oleum ricini, warm bathing and opiates, according to the ſcheme laid down in the preceding chapter.

As ſoon as the ſtone paſſes through the ureter, and falls into the bladder, the pain and other nephritic ſymptoms ceaſe; and every thing will remain quiet, either till the ſtone is carried into the urethra, or until it has remained long enough in the bladder to acquire weight ſufficient to create new diſtreſs.

If a ſtone happens to be ſmooth, and of a roundiſh form, it may lie in the bladder, and acquire conſiderable bulk, before it can be perceived by the patient; but when a ſtone is angular, or has a rugged ſurface, even though it may be ſmall in ſize, yet it ſeldom fails to raiſe pain, and occaſion bloody urine, or the diſcharge of a ſlimey fluid, with teneſmus, and difficulty in making water.

There

There have been various attempts, and pretences made to diſſolve the ſtone.

The things which have been found moſt effectual, are thoſe that powerfully abſorb the fixed air from bodies, and at the ſame time readily combining with oils, render them miſcible with water. There is ſcarce any earthy ſubſtance that abounds more in oil, and alſo contains ſuch a quantity of fixed air as the human calculus; and hence it is, that the cauſtic fixed alcaline ſalt is ſuch a powerful diſſolvent of the ſtone; but this being of a very acrid nature, it requires to be well ſheathed by means of ſome gelatinous or mucilaginous vehicle. Veal-broth is as convenient as any for this purpoſe, and accordingly it is uſed by thoſe who make a ſecret of the cauſtic alcali, as a vehicle for the ſoap lees.

Mr. Blackrie, who has taken much pains in this inquiry, has proved very ſatisfactorily, that Chittick's noſtrum is no other than ſoap lees, given in veal-broth, which the patients ſend every day to the doctor, who returns it mixed up with the medicine, in a cloſe veſſel ſecured by a lock.

It is not every caſe, however, that either requires, or will bear a courſe of the cauſtic alcali.

Some calculi are of that ſoft and friable nature, that they will diſſolve even in common water, and there are caſes wherein it appears that the conſtant uſe of ſome very ſimple decoction, or infuſion of an inſignificant vegetable, has brought away large

large quantities of earthy matter, in flakes which apparently have been united together in layers to form a ſtone. As for inſtance, it has been affirmed to the author, by a perſon of veracity, that a decoction of raw coffee, only thirty berries, in a quart of water, boiled till it acquired a deep greeniſh colour, taken morning and evening to the quantity of eight or ten ounces, with ten drops of ſweet ſpirit of nitre, had the powerful effect of bringing away, in the courſe of about two months, as much earthy matter in flakes as filled a large tea-cup. The patient was far advanced in years, and before he began this decoction, had been reduced to great extremities by the continuance of pain and other diſtreſſing ſymptoms: he was purged occaſionally with oleum ricini.

An infuſion of the ſeeds of daucus ſylveſtris, ſweetened with honey, is another ſimple and approved remedy; and has been found to give conſiderable eaſe in caſes where the ſtomach could not bear any thing of an acrid nature: the leaves of the uva urſi were ſtrongly recommended by the late very celebrated De Haen. But where the ſtomach will bear it, and there is no ulceration in the caſe, nor exceſſive ſenſibility in the uropoietic organs, either the ſoap lees in * new milk, or veal-broth, or ſoap pills and lime water, will bid faireſt to do effectual ſervice, either by diſſolving the ſtoney concretions, or at leaſt rendering the ſharp points

* The patient muſt begin with ſmall doſes of the lees, ſuch as 30 or 40 drops, and increaſe by degrees, as far as the ſtomach will bear.

points and rugged ſurface leſs capable of injuring the ſenſible membranes of the parts where theſe hard bodies lodge, or happen to paſs through.

But in ſuch caſes, as will not allow us to think of diſſolving the ſtoney concretions, and where the only ſcheme is to palliate and procure eaſe from time to time, little more can be done than to keep the bowels open occaſionally by ſome gentle cathartic, and waſh off as much of the looſe gravelly matter and ſlime, as can be removed by ſuch mild diuretic infuſions and decoctions, as ſhall be found to paſs freely, and ſit well on the ſtomach. Perſons afflicted with the ſtone ſhould be careful in reſpect of their diet, and ſtudiouſly avoid all heavy and flatulent food, as well as high ſauces that are apt to turn rancid; for the ſame reaſon, butter and acids are to be ſhunned, for theſe often create heart-burning, and every thing that offends the ſtomach raiſes the nephritic pain; ſuch is the ſympathy that obtains between the digeſtive and the uropoietic organs.

There have been ſurgeons bold enough to entertain an idea of cutting even into the kidney, in order to extract a ſtone: this, however, except in caſes where an abſceſs has been formed, and nature points out the way, is merely chimerical. But cutting into the bladder for the ſame purpoſe, is an ancient and well-known operation, and often crowned with ſucceſs. The writers on the operations of ſurgery, * give directions for the different ways

* Heiſter, Le Dran, Sharp, &c.

ways of performing lithotomy; to theſe we refer, and ſhall only make this remark, that a ſurgeon ſhould never begin his operation, until he, and his aſſiſtants are perfectly ſatisfied, from actually feeling the ſtone, that there is one in the bladder: becauſe it has ſometimes happened, that when the inciſion has been made, no ſtone could be found; and the patient having died in conſequence of the operation, and the body being opened, it has appeared that the ſymptoms which occaſioned the belief of a ſtone in the bladder, aroſe from ſome other cauſe.

CHAP. X.

Of the Iſchuria; its different Species and Varieties; and Methods of Treatment.

SAUVAGES has arranged the *iſchuria* very oddly; not among the painful diſeaſes, where one might expect to find it, (there being no caſes whatever attended with more ſevere pain than ſtoppages of urine) but in the claſs of cachexies, and order of dropſies. However, there is ample amends made for this inaccuracy, by the minuteneſs of the deſcriptions of the different ſpecies, for which he acknowledges himſelf indebted to Dr. Cuſſon of Montpelier. This gentleman has made no leſs than forty-four diſtinctions, and has quoted his authorities for the ſeveral hiſtories.

Theſe

Theſe we recommend to be conſulted occaſionally, and ſhall content ourſelves to conſider the iſchuria only in three points of view: Firſt, when the urine, being ſtopped either in the kidneys or ureters, does not come into the bladder. Secondly, when, after it has got into the bladder, it cannot be diſcharged thence, on account of ſtoppages at the neck, or from want of power in the muſcular fibres of the coats to overcome that of the ſphincter: And, thirdly, when ſtrictures of the urethra, or other obſtacles in that canal, hinder the urine from running off. Thus we have three ſpecies of the iſchuria:

1. *Iſchuria renalis*;
2. *Iſchuria veſicalis*;
3. *Iſchuria urethralis*.

Of each of theſe we may diſtinguiſh different varieties, from the different cauſes which give riſe to the diſeaſe.

Of the iſchuria renalis, there are,

1. *Iſchuria renalis ab inflammatione.*

The ſigns of this variety, and the method of treatment will be found by recurring to the nephritis.

2. *Iſchuria renalis ſpaſmodica.* A ſuppreſſion of urine is ſometimes brought on by a ſpaſmodic conſtriction

conſtriction of the tubuli uriniferi, in conſequence of ſympathetic connection, though there be no ſettled local diſorder in the kidneys. This happens in ſubjects of the hyſteric conſtitution; and is to be known from the circumſtances which peculiarly mark this temperament, and from the abſence of all ſigns of ſtone or gravel, as well as of every ſort of external hurt, or injury, that could raiſe inflammation in the part affected. Theſe ſpaſmodic ſuppreſſions generally yield to opiates, aided by terebinthinate clyſters, and the warm bath.

3. *Iſchuria renalis mucoſa*; when there is ſuch an abundance of mucus, thrown into the renal veſſels, as to hinder the neceſſary ſecretion. This will be known from the ſmall quantity of turbid urine; while it appears, from the abſence of pain, and tenſion in the region of the pubis, that there is no retention of it in the bladder. An obtuſe pain, and heavineſs in the loins; the abſence of thoſe ſigns which denote ſtone or gravel; and the general phlegmatic habit of the patient, will ſerve to diſtinguiſh this variety of the diſeaſe; which is to be cured by the ſtimulating diuretics, ſuch as horſe-radiſh root, and muſtard-ſeed, together with ſquills, infuſed in Rheniſh wine.

4. *Iſchuria renalis calculoſa*; when ſtones or gravel ſtop the paſſage, leading from the kidney, to the bladder.

This is a caſe that frequently occurs, and the means for relieving it, are warm bathing, and opi-

ates; the neceſſary evacuations, by bleeding, and purging, being premiſed: but if relief is not obtained, in the courſe of a few days, the blood will become ſo corrupted, by the detention of thoſe acrid particles, which ought to be thrown off by urine, that a new train of moſt alarming ſymptoms will ſupervene; (namely, inexpreſſible nauſea, and vomiting; coma; delirium; convulſions;) and ſoon carry off the patient.

ISCHURIA VESICALIS.—It is eaſy to diſtinguiſh the *iſchuria veſicalis* from the *renalis*, by the ſeat of the pain, which is at the pubis, and by its violence; for, when the urine is retained in the bladder, the diſtenſion of the ſenſible fibres raiſes a moſt excruciating pain, together with a frequent inclination to make water, and an evident degree of ſwelling, and tenſion at the lower part of the belly.

The different cauſes of this ſpecies, will make ſome alterations, with reſpect to the methods which are to be purſued, in order to prevent a relapſe: as to the ſcheme of procuring immediate eaſe, it is the ſame in all caſes; for, whenever we find that there is a total ſtoppage, and that throwing up a terebinthinate clyſter, fomenting the abdomen, and taking away the proper quantity of blood in ſuch conſtitutions and caſes as demand that evacuation, do not immediately bring on the wiſhed-for diſcharge, we are not to loſe time, but without further delay endeavour to introduce the catheter, and by that means empty the bladder; this being done, the patient is to lie quiet, and, if the inteſtines have not been already ſufficiently

ently cleared, have a clyſter thrown up, and take an opiate.

If in twelve hours the bladder ſhould fill again, and the patient can make no water, we muſt not ſuffer the violent pain to come on, but draw off the urine a ſecond time. After this we are to regulate our proceedings according to the circumſtances of the caſe.

If the ſtoppage was brought on by a ſtone plugging up the neck of the bladder, and which could be ſhoved back by the catheter, the complaint will probably not return for ſome time, unleſs that a conſiderable degree of inflammation ſhould be raiſed; and in theſe caſes we are to take all poſſible precaution to prevent one from enſuing, by purſuing the methods already laid down for the cure of the cyſtitis. This variety of the diſeaſe is termed *Iſchuria Veſicalis Calculoſa.*

When the retention proceeds from an inflammation at the neck of the bladder, the term will be *Iſchuria Veſicalis Inflammatoria*; and the treatment muſt be according to the antiphlogiſtic plan. The attempts in theſe caſes to introduce the catheter muſt be made with great tenderneſs; and, when ſuch introduction is found to be impracticable, the only thing left to ſave life is, to puncture the bladder, either in the perinæum, or above the pubis. The former is the moſt adviſable way; and for the methods of performing the operation, we refer to the chirurgical writers, particularly Sharp, in his Critical Enquiry.

When a ſpaſm of the ſphincter occaſions the retention, the name of the diſeaſe is *Iſchuria Veſicalis Spaſmodica.* This ſpaſmodic affection is uſually brought on by ſympathy, from the adjoining rectum, or uterus; in conſequence of ſuppreſſions of the hæmorrhoidal, or menſtrual diſcharge; or when acrid matters are lodged in either place. The catheter is to be cautiouſly, and gently managed, in caſes of ſpaſmodic retention: terebinthinate clyſters, with opium; ſitting over warm ſteams, and fomenting the abdomen, will generally give relief.

When the bladder cannot empty itſelf on account of a paralytic relaxation of its muſcular fibres, the diſeaſe will be called *Iſchuria Veſicalis Paralytica.* This caſe is not uncommon in aged ſubjects. The urine muſt never be ſuffered to remain more than twelve hours, without being drawn off; or a flexible catheter may be left in the bladder: but when this is done, we are to withdraw the inſtrument once in every two or three days, in order to clear it, from the cruſt that forms upon that part which lies within the ſphincter. The cortex and cold bath are required in theſe caſes, and the tinctura cantharidum is alſo preſcribed: poſſibly bliſtering on the os ſacrum, might be of uſe. When the patients recover, which they ſometimes do beyond expectation, they are to be extremely cautious of their regimen, ſhould go to bed early, avoid catching cold, make very light ſuppers, and drink very little in the evenings, leſt they ſhould chance

to

to over-ſleep themſelves, and, in the mean while the bladder become too much diſtended with urine.

Moſt of theſe caſes of paralytic retention are the conſequences of allowing the bladder to be over-diſtended, and may generally be traced back to ſome particular time, when the patient has held in the urine too long. An immediate ſtoppage ſometimes ariſes from this cauſe, and then the term is *Iſchuria Polyurica.*

When a retention ariſes from an ulcer at the neck of the bladder, which is known from the ſeat of the pain, and the purulent urine, it is called *Iſchuria Veſicalis Purulenta.* The introduction of detergent bougies, or throwing up injections of a ſimilar nature, are the means from whence we are to expect a radical cure.

The *Iſchuria hyſterocyſtica*, wherein the ſtoppage is owing to the uterus preſſing on the neck of the bladder, being a diſeaſe of the third claſs, the methods of relief will be pointed out when we come to treat of the diſeaſes peculiar to women.

ISCHURIA URETHRALIS. — There are ſeveral varieties, not leſs than fourteen of the *iſchuria urethralis*, for which we refer the reader to Sauvages. Thoſe which are moſt commonly met with, are from carnoſities, or ſtrictures in the urethra, in conſequence of repeated venereal injuries; and from a ſtone impacted, and ſticking in the paſſage. The firſt is termed *Iſ-*

churia

churia Carunculoſa ; and the ſecond *Iſchuria Urethrolithica.* Bougies are the remedies for the one ; and cutting out the ſtone is the way to relieve the other.

In the hiſtories to be found in Sauvages, it appears that the urethra is liable to be ſtopped up by viſcid mucus ; by purulent matter ; by a membranous ſubſtance ; and by coagulated blood ; as well as to be preſſed on, by tumors in the perinæum, or in the corpora cavernoſa penis ; and there is a very diſtreſſing variety of the iſchuria urethralis, that ariſes from a laceration of the urethra, through which the urine eſcapes into the ſcrotum, and other adjoining parts, and ſwells, inflames, and ulcerates them to a terrible degree ; this is termed *Iſchuria Hydrocelodes :* the treatment is purely chirurgical, and muſt be regulated according to the particular circumſtances of the patient.

CHAP. XI.

Of the Proctalgia ; its different Species, and Methods of Treatment.

WE are now come to the laſt of the painful diſeaſes, the *proctalgia*, or pain about the fundament, and lower part of the inteſtinum rectum. This may ariſe from various ſources, and therefore requires to be diſtinguiſhed.

1. The firſt ſpecies of the *proctalgia* is that which ariſes from inflammation, and therefore it is termed

termed *Inflammatoria.* An inflammation in this part is very apt to terminate in an abſceſs; in the opening of which, it is generally neceſſary, to cut out a piece of the teguments, ſo that the dreſſings may be applied to the bottom of the ſore, in order to heal it up thoroughly; otherwiſe, the ulcer will remain open, and the edges grow callous: whence the *proctalgia fiſtuloſa*, commonly termed *Fiſtula in Ano.*

2. Theſe fiſtulæ are not to be radically cured but by cutting away all the diſeaſed part of the fleſh and teguments. But in order to palliate matters, and render the pain more ſupportable, the patient ſhould always have the bowels kept open by means of ſome gentle laxative, ſuch as oleum ricini; electarium lenitivum, with flowers of ſulphur; or equal parts of cream of tartar and flowers of ſulphur made into an electuary with honey.

3. Theſe laxatives are likewiſe often neceſſary in caſes of the *proctalgia hæmorrhoidalis*, or piles, as this complaint is uſually termed; but when the pain is very ſevere, we muſt have recourſe to topical applications: the juice of the ſedum ſempervivum beat up with the yolk of an egg, and a grain or two of opium; or a cataplaſm of bread and milk boiled up with ſaffron and the yolk of an egg, will generally be found to give relief: fomenting the anus with emollient decoctions, or ſitting over the warm ſteam of them, is alſo recommended; ſoftening liniments likewiſe, with a due proportion of balſam of ſulphur mixed up with them, are of uſe.

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In order to ſtrengthen the parts, and prevent returns of the pain, it will be proper every morning to waſh with cold water; as this will brace up the weakened coats of the *varicoſe* veins, or harden the fungous excreſcences, which (as hath been formerly obſerved) moſt commonly conſtitute this ſpecies of proctalgia.

4. *Proctalgia cancroſa.* When a cancerous acrimony ſettles itſelf at the lower part of the rectum, it conſtitutes a moſt dreadful diſeaſe; ſince little more can be done than to keep the bowels open by gentle laxatives, and to give opiates from time to time. The cicuta has been known to do ſervice in ſome caſes of the proctalgia cancroſa, and therefore ought always to be tried.

5. But ſometimes there is an ouzing of acrid ſerum from the lower part of the rectum, which excoriates, and raiſes intolerable itching and pain. This ſpecies is called *Proctalgia Intertriginoſa*; and, if obſtinate, will not only require the uſe of cooling waſhes and liniments, but alſo alteratives, ſuch as the pil. Ethiopicæ of the Edinburgh Diſpenſatory, and the aqua calcis magis compoſita, to correct the ſharpneſs, and gentle cathartics to prevent the lodgment of acrid matters. Very often this diſeaſe is a conſequence of the ſyphilitic virus, and then there are uſually ſome of thoſe fungous excreſcences termed Mariſcæ, at the verge of the anus, or dry fiſſures called Rhagades. In theſe caſes there can be no radical cure without mercurials, as will be ſhewn in the proper place.

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METHODICAL INTRODUCTION

TO THE

PRACTICE

OF THE

ART OF MEDICINE.

BOOK V.

SPASMODIC DISEASES.

CHAP. I.

Of the Tetanus, Catochus, and Locked Jaw; Deſcriptions and Methods of Treatment.

THE *tetanus*, that was ſet down as the firſt genus of the ſpaſmodic diſeaſes, conſiſts in a rigid contraction of the muſcles in general, but more eſpecially thoſe which ſuſtain and move the trunk of the body; accompanied with paroxyſms of difficult breathing, and very acute pain. When the anterior muſcles are chiefly in the contracted ſtate, ſo as to bend the body forwards, the diſeaſe

is

is termed *Epiſthotonos*; and when the poſterior are in a like condition, ſo as to curve it backwards, the name is *Opiſthotonos*. Theſe may be conſidered as ſpecies of the tetanus; but happily, as original diſeaſes, they are very ſeldom met with, in theſe temperate climates: * ſuch general ſpaſmodic affections do indeed ſometimes ſupervene wounds of the tendinous parts, and now and then a degree of opiſthotonos is obſerved in rheumatic fevers.

The places where theſe violent ſpaſmodic diſeaſes are moſt frequent, are ſuch of the hot countries as are ſubject to ſudden changes from extreme heat, to extreme cold; and where it is not unuſual for the wind, in the height of ſummer, to ſhift ſuddenly, and chill the air all at once; hence it is, that the tetanus is reckoned endemic in South Carolina, eſpecially among the Negroes, who are liable to ſuffer all the ſeverities of the climate, and thoſe of the white inhabitants who incautiouſly expoſe themſelves to the night air.

The tetanus ſometimes attacks ſuddenly, and then it generally proves mortal in 24, 36, or 48 hours; the perſon ſeized ſeldom ſurviving the third day, if the ſymptoms are violent from the very firſt: but it often comes on gradually; the complaint at firſt being rather that of an uneaſy ſtiffneſs in the back part of the neck, and about the ſhoulders, than an acute pain.

This

* A caſe of the true Opiſthotonos (as the author has been informed by a very ſenſible apothecary of this city) occurred in Dublin, in May 1774. The patient was a lad of twelve years of age, and recovered, by the means of large, and frequently repeated, doſes of opium.

This ſtiffneſs increaſes, and becomes ſo troubleſome when the patient attempts to turn his head, or bend it forward, that it obliges him to walk very erect. He cannot open his jaws without pain, and has ſome difficulty in ſwallowing, which diſcourages him from attempting to eat. At times, he feels a ſudden and painful drawing in, under the point of the ſternum, which ſtrikes through to the back, and inſtantly increaſes the rigidity about the neck and ſhoulders, draws the head backwards, and ſhuts the jaws cloſer. The pain under the ſternum returns more frequently, and with greater violence, and the other contractions become ſo ſtrong, that the head from this time continues much retracted: he now refuſes nouriſhment, as ſwallowing is attended with great pain, and occaſions a return of the ſpaſm, which extends along the ſpine, quite to the lower extremities, ſo that the legs can no longer ſupport the body, and the patient is under the neceſſity of going to bed. In this manner, the firſt ſtage of the diſeaſe paſſeth over, which ſometimes takes up three or four days; the patient, as well as thoſe about him, miſtaking the firſt appearance of it, for that trivial rheumatic complaint, which is commonly called a Crick in the Neck. The danger of the diſeaſe is to be eſtimated from the manner of the attack: the more gradual and ſlow, the better chance the patients have to eſcape; for if they can get over nine or ten days they generally recover. Blood, if taken away in this ſtage, ſhews no change from the natural ſtate, ſo that nothing can be inferred from thence; neither

neither is the pulſe accelerated, but it is hard, and the belly is always bound.

The painful drawing in, under the ſternum, is the diſtinguiſhing ſign of the diſeaſe; and if relief be not ſpeedily obtained, this ſevere pain becomes more violent, and returns every ten or fifteen minutes, and, at the ſame time, the muſcles of the neck, and all down the ſpine, are thrown into ſtrong convulſions; the countenance becomes pale and contracted; the jaws are that moment ſnapped together, and cloſed up; and, if attempts are made to force them open, the ſpaſms are thereby hurried on: every hour the diſtreſs grows greater; and toward the cloſe, the miſerable patient is on a continual rack, the ſpaſms returning ſo quick as ſcarcely to leave the leaſt remiſſion; and, at length the whole ſyſtem of muſcles ſwell, and become rigid. But as the poſterior muſcles of the back are more numerous, and overcome the anterior, the ſpine is ſtrongly recurvated, and forms a hollow arch with the bed, the patient reſting only on the back part of the head, and the heels. In this dreadful ſituation, (the muſcles of the abdomen being ſo contracted that the bowels are all forced up towards the thorax) the patient now becomes intenſely hot, and lies in a foam of ſweat, the pulſe being exceedingly quick, ſtrong and irregular, and the heart throbbing ſo ſtrongly, that its motion may plainly be ſeen; the jaws are now locked faſt, ſo that it is impoſſible to get down any drink; or if it even could be got into the mouth, the wretched patient cannot ſwallow; at length a general convulſion

ſion comes on, and then death ſoon puts an end to the torture.

There has never been any thing like a criſis obſerved in theſe frightful caſes, or favourable termination from the mere efforts of Nature, and therefore all the phyſician's dependence muſt be upon Art. Fortunately it has been found, that opium is capable of giving ſome relief, if adminiſtered in proper time, and the diſeaſe happens not to be in the moſt violent degree; the warm bath muſt alſo be brought in aid; and the patients ſhould lie horizontally in the bath, and while in it, have the whole body extremely well rubbed; when taken out, they are not to be dried, but immediately put to bed, wrapt up in the ſofteſt blankets, and while they remain there, the belly ought either to be ſtuped, or two or three bladders filled with warm water kept conſtantly lying on it. The bowels at the ſame time muſt, if poſſible, be kept open, by ſolutions of manna and ſal polychreſt, or ſome other purging ſalt, mixed with oleum ricini; or if that ſhould not be at hand, with oil of ſweet almonds and a little tincture of ſena. The opiates are to be given in large, and frequently repeated doſes; ſuch as a grain of the extractum thebaicum, or twenty drops of the tincture, every ſecond or third hour; and it will be ſafeſt, not to truſt to the thebaic tincture which is kept ready prepared in the ſhops, but order the neceſſary doſe of ſolid opium, and either give it in pills, or diſſolve it in ſome convenient liquid. If ſwallowing ſhould be difficult, or the jaws cloſed up, the opium muſt be given in the clyſters; for

for during the whole courſe of the diſeaſe, it will be of ſervice to order emollient clyſters to be injected from time to time, ſince theſe will anſwer not only as a relaxing fomentation, but alſo contribute to keep the inteſtinal canal perfectly free.

When the patients recover, they continue for a long time very relaxed and weak, and no wonder; ſince it is the nature of all ſpaſmodic affections to leave behind them extreme weakneſs and relaxation of the muſcular fibres: in order to perfect the recovery, a courſe of the cortex, and the Peruvian balſam, are to be tried, and the ſpine may be rubbed with ſpirituous liniments, or with a mixture of rum and Barbadoes tar; but theſe and all other ſtimulating things, either internally or externally, during the violence of the ſpaſms, muſt be omitted, ſince all of them, as well as bliſters, are found to exaſperate the diſeaſe.

This, in general, is the plan of treatment recommended by Dr. Chalmers, of Charleſtown, South Carolina, to whoſe paper, we refer, in the 1ſt vol. of the Medical Obſervations. But ſince the time of that publication, we are told by Dr. Donald Monro, that rubbing in mercurial ointment, ſo as to raiſe a ſalivation, is a ſtill more certain and efficacious way of treating the tetanus. (See the 3d vol. of the Edinburgh Phyſical and Literary Eſſays, page 553.)

CATOCHUS.—When a general ſtiffneſs and rigidity of the muſcles prevail, accompanied with inſenſibility,

inſenſibility, or without the pain and difficulty of breathing peculiar to the tetanus, the diſeaſe is termed Catochus.

This is a very uncommon diſeaſe, and of the chronic kind; whereas the tetanus is of the moſt acute nature.

Hyſterical women and children, appear to be the ſubjects, wherein this diſeaſe has been obſerved. An infant, apparently ſtrong and healthy when it was born, became rigid at a week old, the whole ſyſtem of muſcles appearing to be affected by a ſpaſmodic contraction, accompanied with inſenſibility; it lay like a corpſe, cold, pale, and every now and then a convulſive working of the legs and arms ſupervened, which, by twiſting the joints, ſeemed to produce diſlocations at the wriſts and ankles. Things continued in this ſtate three weeks, to the great amazement of every one who ſaw the child; for it had not power to ſuck, and oftentimes did not ſwallow ſuch food as was put into the mouth; ſo that the chief nouriſhment was from clyſters of broth, which were ordered to be frequently injected; but even theſe were often neglected, as the nurſe conſidered them, and all other attempts, as vain, imagining every hour would be the laſt of ſuch a wretched exiſtence: however, contrary to all expectation, the muſcles gradually became flaccid, the joints pliable, and the convulſive workings ceaſed; the child began to feed, and by degrees recovered, grew ſtrong and plump, and the limbs, which

which every one imagined would remain crooked, (they had been ſo twiſted by the convulſions) became ſtraight; inſomuch, that in ſix months it acquired as thriving an appearance, as children uſually have at that age. It continued to thrive, paſſed through its teething without much difficulty; was ſeized with the ſmall-pox, and recovered; but, at laſt, when about two years old, died of an inflammation in the lungs. This caſe fell under the inſpection of the author.

There is alſo a very curious one in the 1ſt vol. of the Medical Obſervations, page 280, of a woman about fifty, who for ſome years was daily ſeized with a rigid contraction of all the muſcles, accompanied with ſuch a profound ſleep, that nothing could rouſe her. She always remained in this ſtate from ſun-riſe till ſun-ſet, then ſhe gradually came to herſelf, after a convulſive agitation; ſhed tears; went to ſtool; took her food, which was wine and biſcuit; remained awake the whole night, and at ſun-riſe again relapſed.

The diſeaſe which Sauvages terms *Catochus Cutaneus*, ought to be referred to the cachexies, and is alſo very uncommon. There was one ſome years ago in Stevens's Hoſpital, Dublin. The ſkin gradually becomes hard and ſhining, like parchment. Warm bathing and mercurials, with plentiful dilution by whey, and decoction of ſarſaparilla, perfected a cure.

And what he calls *Catochus Scorbuticus* alſo belongs to the cachexies, and may be termed *Sarcoſtoſis*; the muſcles become hard, not from ſpaſ-

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modic contraction, but from a degeneracy of their texture, into a ſubſtance ſimilar to that of the bones, and which hath been known to become as hard; as appears in the remarkable ſkeleton of a perſon named Clark, preſerved in the Muſeum of Trinity College, Dublin, and of which there is an account in the Philoſophical Tranſactions.

LOCKED-JAW.—That rigid contraction of the muſcles, which raiſes the lower jaw, and which is commonly called the Locked-Jaw, is termed by Vogel *Capiſtrum*, and by Sauvages *Triſmus Tonicus*.

This diſeaſe, like the tetanus, is often ſeen in the hot countries; and is alſo brought on, by ſudden cold ſucceeding extraordinary heat; hence, very frequent in the Weſt Indies, eſpecially among the ſlaves, who, having been much heated with hard labour during the day, are expoſed to the rain, or heavy dews in the night: in our temperate climate, it occurs but ſeldom, and, for the moſt part, is found ſupervening wounds of the tendons; though, now and then, a caſe appears wherein it ſeems to ariſe ſpontaneouſly, independent of any external injury.

The treatment is to be conducted preciſely on the ſame plan, with that propoſed for the tetanus, and therefore need not be repeated. In the firſt volume of the London Medical Obſervations, there are caſes of both ſpecies of locked-jaw, the primary and ſecondary, treated with ſucceſs; to theſe we refer the reader, as well for a mi-

nute detail of the concomitant ſymptoms, as for the remedies that were uſed.

CHAP. II.

Of the Hydrophobia; its different Species and Method of Treatment.

DR. Nugent (in his celebrated eſſay, to which we refer) firſt pointed out the true nature of the *Hydrophobia*, which before his time had generally been conſidered as an inflammatory diſeaſe.

Sauvages, agreeably to the vulgar opinion, has placed it with the *Veſaniæ*, but improperly; as the diſtinguiſhing ſymptoms are different from what we obſerve in any ſpecies of madneſs, and, at firſt, the patients are not at all delirious: the ſnapping, which is common in the hydrophobia, and which is generally conſidered as an attempt to bite the attendants, is an involuntary motion of the jaws, ſuch as is obſervable in the tetanus; and ſo far are the unhappy ſufferers from deſiring to injure thoſe about them, that they uſually warn the by-ſtanders to keep at a diſtance.

The diſtinguiſhing circumſtance of this moſt terrifying of all diſeaſes, appears to depend on a ſpaſmodic affection of the muſcles ſubſervient to deglutition, accompanied with ſuch ſevere agony as makes the patient dread their being thrown into action. When treating of the quinſey, it was obſerved, that the ſwallowing of liquids, requires the action

action of a much greater number of the muſcles of the pharynx than the ſwallowing of ſolids does; and hence we may conceive the reaſon why hydrophobic patients can get down a bolus, while they cannot poſſibly let over a drop of drink.

The hydrophobia * is either an original diſeaſe, ariſing ſpontaneouſly, or it comes on in conſequence of the bite of ſome mad animal; the latter ſpecies is the one moſt frequently met with, and ſeldom appears until after three or four weeks from the time of being bitten; it is obſervable, however, that the nearer the wounded place is to the ſalivary glands, the ſooner the ſymptoms of hydrophobia appear.

A few days before theſe ſymptoms come on, the patient grows languid, dull, and reſtleſs, with great oppreſſion, and frightful dreaming; then, all of a ſudden, for the moſt part, pains begin to ſhoot from the place where the ſkin was torn, all along up to the throat, where it cauſes a ſtraitneſs and ſenſation of choaking, with a total inability to ſwallow liquids.

This inability to ſwallow liquids is not always attended with a dread of them: for ſome patients have been obſerved extremely deſirous to drink, and have tried a variety of ways, and put themſelves

* The author is in poſſeſſion of two well authenticated hiſtories of hydrophobia, that appeared to be ſpontaneous; at leaſt, the diſeaſe could not be traced back to the bite of a mad animal or any other external injury. One of the patients was a gentleman of conſiderable fortune in the county of Galway, and the caſe was drawn up by the phyſician who attended him.

ſelves into different poſtures, in order to accompliſh it: but Dr. Nugent's patient had ſo great a dread, that ſhe could not bear to hear even the noiſe of falling-water, much leſs endure the ſight of it. The ſpaſms in the hydrophobia, which at firſt ſeem confined to the muſcles of deglutition, as the diſeaſe advances, go on to affect other parts of the muſcular ſyſtem, and produce many ſymptoms, like what are ſeen in the tetanus; and in men of high vigour, a priapiſm, or even ſomewhat like a ſatyriaſis, has been known to ſupervene.

The cure of this dreadful malady muſt be attempted on the ſame principles with that of the tetanus; namely, to take off the ſpaſm by large, and often-repeated doſes of opium. Dr. Nugent's patient was freely blooded, and took moreover large quantities of muſk and cinnabar, as well as opium; and, toward the cloſe of the cure, the opium was given along with camphor, muſk, and aſafœtida. But opium is what we are chiefly to rely on. It ought therefore to be given as ſoon as poſſible, and in both ways, by the mouth and by clyſter, and it ſhould be applied externally in plaſters, liniments, or cataplaſms.

Unfortunately however, from all that has yet been publiſhed, it appears that theſe means avail but little; the inſtances of recovery, after the ſymptoms of hydrophobia have actually taken place, being extremely few; and of theſe few, ſome of the caſes might be objected to: even Dr. Nugent's famous patient, Elizabeth Bryant, appears to have been of a very hyſterical habit, and in theſe conſtitutions we ſometimes meet with ſymptoms of difficult

difficult deglutition that approach near to the hydrophobia, and if the patient's imagination ſhould chance to be worked up, they would probably terminate in the true dread of water.

If there be any truth in the common adage, that deſperate diſeaſes require deſperate remedies, there ſurely cannot be a ſituation, in which the trial of a bold experiment, is more juſtifiable than in this now under conſideration: we therefore venture to propoſe the following.

The moment that the ſymptoms of difficulty in ſwallowing liquids begin to appear, let the patient be put on a courſe of the ſtrong mecurio-ſaline ſolution, which will be deſcribed hereafter when treating of the lues venerea, and give it in as large doſes as the age, ſex, and conſtitution will poſſibly admit; treble, or at leaſt double the number of drops, that we ſhould venture to adminiſter on any other occaſion; and along with this preparation, let the opium alſo be given in thoſe large and frequent doſes that have been already directed. The warm bath ſhould alſo be uſed, and every thing ſhould be done to encourage the patients, and prevent deſpondency: neither friends, nor attendants ſhould quit them, under the notion of their being mad, ſince this is by no means the caſe, in the beginning, at leaſt, and probably they would not, in the end, become delirious, if it were not from prepoſterous treatment; ſince delirium ſeems to be no more a genuine ſymptom of the hydrophobia than it is of the tetanus or locked-jaw; and if this were well underſtood,

ſtood, it would greatly alleviate the ſufferings of thoſe unhappy perſons who chance to be ſeized with that diſeaſe, as it would not deprive them of the comforts of neceſſary attendance, nor cauſe that cruel deſertion of friends which is but too common on theſe melancholy occaſions.

After a perſon has been bitten by a mad animal, if inſtantly cutting out the piece be neglected, (which ſeems the only certain way of preventing future miſchief) the moſt likely method of ſecuring againſt the hydrophobia appears to be, rubbing in mercurial ointment, ſo as to raiſe a ſlight ſalivation, which muſt be kept up for ſome weeks. Bathing in the ſea, and taking the pulvis antyliſſus, have often been found inſufficient, and the famous Ormſkirk powder, which, at preſent, is cried up as a preſervative, is conſidered by the ſociety of phyſicians in London, who publiſh the Medical Obſervations, as not worthy of being depended on, as a ſecurity againſt the fatal effects of this very ſingular poiſon. (See Dr. Fothergill's paper in the 5th volume, page 290.)

CHAP. III.

Of Convulſions, Epilepſy, Eclampſia, and Hieranoſos; different Species, and Methods of Treatment.

IN the ſpaſmodic diſeaſes which have been already treated of, the muſcles, for the moſt part, continue in a ſtate of contraction, whence they are termed

termed *Tonic*; but in the four genera that remain to be described, there is a violent working or agitation, and Nature seems endeavouring to expel, or shake off somewhat that offends her; hence these are called *Clonic* Diseases.

In common language, all the various species of clonic diseases are termed *Convulsions*; but here we are to understand by this name, only that general convulsive-working of the muscles, which invades accidentally, the patient remaining sensible. Sauvages has made sixteen distinctions of convulsions, which practitioners will find useful to consult occasionally; but we shall mention only a few.

1. *Convulsio ab inanitione.* After profuse discharges or evacuations, convulsions are apt to succeed; and in these cases, the convulsive-workings appear to be the efforts of Nature to prolong life, by forcing the blood, which is stagnant in the small vessels at the circumference of the vascular system, in upon the larger ones at the center.

In these circumstances, pharmaceutical remedies are of no use; but we are to endeavour to fill the vessels, and repair the loss of animal fluid, by frequently giving light broths in such quantities as the stomach will bear.

2. *Convulsio traumatica.* When convulsions succeed wounds, or other external injuries, we are, after plentiful bleeding, according to the circumstances of the case, to apply emollient cataplasms, relaxing fomentations, and liniments; to empty the bowels by clysters; and give opiates in large doses,

doſes, combined with other powerful antiſpaſmodics, ſuch as muſk, and aſafœtida.

3. *Convulſio verminoſa.* Worms are a frequent ſource of convulſions, eſpecially in young ſubjects; and when there are ſufficient evidences that the diſeaſe ariſes from this ſource, recourſe muſt be had to anthelminthics, as in other worm caſes.

4. *Convulſio plethorica.* In habits that have been accuſtomed to periodical diſcharges, when theſe are obſtructed, convulſions ſometimes ſucceed: the cure is to be attempted by proper evacuations, and reſtoring the diſcharge to its natural order; on this principle it is, that convulſions often ceaſe upon the firſt breaking out of the menſes in young girls.

Epilepſy.

The *epilepſy* differs from a convulſion, in its being accompanied with total inſenſibility; returning, at uncertain intervals; and being a chronic diſeaſe, that often laſts for a number of years without deſtroying life.

Perſons afflicted with the epilepſy fall down ſuddenly, deprived of all ſenſe, like thoſe who are ſtruck with an apoplexy, but they do not, like theſe, lie quiet, as if in a profound ſleep; on the contrary, the whole muſcular ſyſtem is agitated by ſuch violent convulſive motions, that it is ſcarcely poſſible for the by-ſtanders to keep the patients from hurting themſelves; and if the tongue ſhall happen to get between the teeth, during

during the violence of the paroxyſm, it will at leaſt be torn, or perhaps a part of it may be cut off.

The force of the convulſion is ſometimes ſo very great, that the urine, fæces, and ſemen, are forced out from their ſeveral repoſitories, and blood will often ouze from the veſſels in the noſe and ears; even in the more moderate degrees of epilepſy, there is always a good deal of froth ſeen about the mouth.

The duration of the fit is various; but when the violent working ceaſes, the patients lie quiet, as if aſleep, then, after an hour or two, they recover their ſenſes, know nothing of what has paſſed, and feel extremely ſore and fatigued.

The total loſs of ſenſe is what diſtinguiſhes the true epilepſy; and by attending to this circumſtance, we may always be able to know whether the diſeaſe be counterfeited; which impoſtors in military hoſpitals, and vagabonds, to extort charity, are often found to do: theſe may be detected, by applying ſomewhat extremely ſtimulant to the noſtrils, ſuch as the ſtrongeſt ſpirit of ſal ammoniac; or by ſlightly puncturing ſome very ſenſible part.

It is vulgarly ſuppoſed, that the change and full of the moon have ſome influence in bringing on the fits: this, however, is much to be doubted; but it is certain, that exceſſes of every kind, whether in reſpect of diet, exerciſe, or the paſſions of the mind, ſeldom fail to accelerate the return of the paroxyſm.

Few

Few diſeaſes are more capable of being tranſmitted from parents to their offspring than the epilepſy; it has alſo been known to take its riſe from ſevere frights during the earlier periods of life. Dr. Locker, phyſician to the hoſpital of St. Mark at Vienna, relates, that out of fourteen epileptic patients in that houſe, he found there were ſix of them wherein the diſeaſe had enſued from frights; one caſe, wherein it appeared to be the conſequence of a blow on the head; another, where it aroſe from a ſudden ſtoppage of the menſes; but in the remaining ſix, the ſource could not be traced.

If an epilepſy, which has begun during childhood, does not go off, upon the changes that happen in the conſtitution of both ſexes, about the age of puberty, we may conſider it as likely to endure for the remainder of life.

The diſſection of epileptic ſubjects has ſhewn a variety of morbid appearances, which may be ſuppoſed to have contributed to the diſeaſe; ſuch as, indurations in the brain or meninges; caries of the internal ſurface of the cranium; projections of the boney ſubſtance of the ſame, preſſing upon the brain; collections of ſerum, or purulent matter, and earthy concretions within the ſcull; beſides many others which are recorded by Bonetus, Morgagni, and Lieutaud.

The methods of cure which ſometimes ſucceed in the epilepſy, are chiefly empirical, and different things have, from time to time, been cried up as remedies; particularly the cranium humanum, and

and more eſpecially the moſs growing thereon; the ungula alcis; miſletoe of the oak; the oleum animale; and of late the leaves of the orange tree; a handful boiled in a pint of water, for two doſes, or, in ſubſtance, half a dram powdered, twice a-day, are ſaid by the phyſicians at Vienna to be ſpecifics in this diſeaſe. The cuprum ammoniacale in doſes of a grain or two, has ſometimes done ſervice; and there are ſome hiſtories where the flores zinci appear to have ſucceeded; the cortex and valerian, joined with cinnabar, and made into an electuary, has been found to check the progreſs of an epilepſy for ſome time; and, in convulſive caſes of leſs inveteracy, will bid fair to be of laſting uſe.

Courſes of different mineral waters, according as they ſhall be found to agree beſt; goat's-whey; ſea-water, with cold bathing; perpetual iſſues between the ſhoulders; ſeton in the neck; gentle purgatives from time to time to prevent coſtiveneſs, and emetics to hinder the accumulation of ſaburra; bleeding occaſionally, as the habit may chance to require it; all theſe will be found of uſe in different ſubjects, to palliate and moderate the violence of the fits. But what is of ſtill greater importance is the regimen of diet: a very ſparing uſe of animal food, or even a total abſtinence from it, and from inebriating drinks, has been found to prevent frequent returns of the paroxyſm, as well as render the fits leſs violent. The mind alſo ſhould be always kept as free as poſſible from the diſturbance of unruly paſſions.

During

During the fit, all attempts to ſhorten it, or abate the violence of the convulſion, are generally found ineffectual; therefore, it is beſt to do nothing more than prevent the patients from bruiſing themſelves, and eſpecially to take care leſt the tongue ſhould get between the teeth.

It ſeems of very little practical uſe to diſtinguiſh the epilepſy into different ſpecies; although Sauvages makes fourteen, to whom we refer. The *epilepſia uterina*, or hyſteric epilepſy, is the only one that requires much notice.

This is peculiar to women of the hyſteric temperament; and may be diſtinguiſhed from the true epilepſy, by the ſex of the patient, and the known prevalence of hyſteric ſymptoms of other kinds, previous to the convulſive attack. Though the patient is ſuddenly ſeized, and falls down as in the true epilepſy, and the violent ſtruggling is equally great, yet the degree of inſenſibility is ſeldom altogether ſo complete. The patient generally ſhrieks, laughs, or utters ſome incoherent words during the fit. Obſtruction of the menſes is the uſual ſource of the epilepſia uterina, and the fits uſually come on about the time that this natural diſcharge ſhould appear.

Eclampſia.

The *eclampſia* differs in nothing from the epilepſy but its being only a tranſient paroxyſm, not liable to return at intervals, or continue for a length of years. The appearances during the fit are preciſely the ſame, the convulſive-working is equally

equally ſtrong, and the degrees of inſenſibility as great as in the epilepſy.

It ſeems doubtful whether this ought to be conſidered as a diſtinct genus; becauſe of the whole ſeventeen ſpecies which Sauvages hath diſtinguiſhed, there is ſcarcely one that is not ſymptomatical or ſecondary, ſupervening ſome other diſeaſe, though ſometimes theſe fits invade without any evident cauſe. The author was lately called to viſit a boy, of about eleven years of age, who was ſeized without any previous complaint, with a moſt violent convulſion, accompanied with total inſenſibility, and ſuch ſtrong working as to force off the urine, and fæces: no cauſe could be aſſigned, unleſs eating heartily of bread and butter and honey, could be conſidered as ſuch: no leſs than eight of theſe fits, which held at leaſt fifteen minutes, ſucceeded each other, preciſely every ſecond hour; and did not ceaſe, until a purging came on in conſequence of two ſharp clyſters, and a ſtrong cathartic potion; after a few copious ſtools there was no return of the convulſion, and it never appeared afterwards, though the patient did not recover his ſenſes, completely for three or four days; and when he did, he ſaid he had not the leaſt recollection of any thing that had happened, during the whole time.

Hieranoſos.

The *hieranoſos*, or *morbus ſacer*, ſo called, as being vulgarly ſuppoſed to ariſe from witchcraft, or ſome celeſtial influence, is a very uncommon diſeaſe.

diſeaſe. The author once had an opportunity of ſeeing a caſe. The patient was a lad about ſeventeen, who at that time had laboured under this extraordinary malady for more than twelve years. His body was ſo diſtorted, and the legs and arms ſo twiſted round it, by the continued convulſive working, that no words can give an adequate idea of the oddity of his figure; the agitation of the muſcles was perpetual; but in general he did not complain of pain or ſickneſs; and had his ſenſes ſo perfectly, that he uſed to aſſiſt his mother, who kept a little ſchool, in teaching children to read. It is not known, how he lived in this condition.

A METHO-

A

METHODICAL INTRODUCTION

TO THE

PRACTICE

OF THE

ART OF MEDICINE.

BOOK VI.

INABILITIES AND PRIVATIONS.

CHAP. I.

Of the Comata, or ſleepy Diſeaſes; different Species, and Methods of Treatment.

THE writers are not well agreed about the ways of diſtinguiſhing the ſleepy diſeaſes. Sauvages makes *coma* an order, and divides it into ſeven genera; of which he diſtinguiſhes no leſs than ſixty-five ſpecies. This minuteneſs, however, is not neceſſary here, and rather tends to embarraſs the ſtudent. We therefore conſider *coma* as the genus, and diſtinguiſh only four ſpecies; the *apoplexy*, *carus*, *lethargy*, and *catalepſy*.

I. The

I. The *apoplexy* is a ſudden privation of all the powers of ſenſe and voluntary motion; the joints remaining flexible, and the muſcles flaccid; the perſon affected ſeeming to be in a moſt profound ſleep, accompanied with ſonorous breathing.

II. The *carus* is a moſt profound and quiet ſleep, protracted beyond the natural and healthy period, from which the patient cannot be rouzed.

III. The *lethargy* is an imperfect carus; wherein the patient may be rouſed, but immediately falls aſleep again.

IV. The *catalepſy* is a ſtate of utter inſenſibility; the muſcles nevertheleſs ſtill retaining ſo much of their power, as to preſerve the limbs in whatever poſture the by-ſtanders chuſe to place them.

Apoplexy.

We ſhall know a fit of the *apoplexy* from that of ſwooning or fainting, by obſerving the pulſe and the reſpiration. In apoplectic caſes, the pulſe at firſt is always ſtrong and full, the breathing rather high, and generally accompanied with ſnoring; the countenance fluſhed for the moſt part, but it always looks full, and the body feels warm: whereas, in caſes of fainting, the pulſe is either greatly weakened, or not to be felt at all; the breathing is not obſervable, the countenance falls; the redneſs forſakes the lips; and the fleſh grows cold.

On being called to perſons ſtruck with an apoplexy, we ſhould always make ſtrict inquiry, into every

every thing the patient has been doing, or taking, previous to the attack; as well as into the particular circumſtances relative to the conſtitution or habit of body; from whence, we may poſſibly be enabled to form a proper judgment of the caſe.

In general, the apoplexy ſeizes people who are paſt the prime of life, inclined to corpulency, with ſhort necks, and who indulge too much in the pleaſures of the table, without taking proper exerciſe; and the diſſections of ſubjects who die of this diſeaſe, for the moſt part, ſhew, that the brain has been oppreſſed, either by blood or ſerum; whence the diſtinctions of the apoplexy, into *ſanguineous*, and *ſerous*.

The *apoplexia ſanguinea* is ſuppoſed to invade more ſuddenly than the *ſeroſa*, without much previous oppreſſion, or unuſual ſleepineſs; the face appears red and fluſhed, the veins turgid, the eyes half open, but not tranſparent; the reſpiration tolerably free, though accompanied with ſnoring or rattling in the throat, and the pulſe full and ſtrong.

The *apoplexia ſeroſa* is apt to be preceded by an unuſual heavineſs, giddineſs and drowſineſs; and, after the ſtroke, the face is not remarkably red or fluſhed; the veins are not turgid, but the reſpiration is much ſtraitened, and there is a great deal of rattling and ſnoring, with a working of froth from the mouth; the pulſe is neither ſtrong, nor uncommonly full, but is often intermittent.

There have been inſtances where an apoplectic fit has wrought itſelf off by an effort of Nature;

and where a profuſe ſpitting, a bleeding at the noſe, or a plentiful diarrhœa, have ſaved life: but in general the patients are beholden to Art for their preſervation.

Of whatever nature the apoplexy may be deemed, it demands the moſt active endeavours to give relief, and remedies that ſhall operate immediately. We muſt inſtantly bleed, and that largely; unleſs it ſhall appear that the patient is of a very weakly habit, with ſolids relaxed, and fluids exhauſted, the diſeaſe alſo having made its approaches gradually. It is beſt at firſt to take blood from the arm, and then, if relief is not immediately procured, having put the feet into warm water, to open the ſaphæna. The quantity of blood to be drawn muſt be regulated according to the ſigns of fulneſs; if the patient be very plethoric, the bleeding muſt not only be large, but it muſt be repeated; and cupping-glaſſes, with deep ſcarification, muſt be applied to the back part of the head, with a view to empty more particularly the occipital veins, which having a communication with the lateral ſinuſes of the dura mater, will more immediately contribute to unload the veſſels of the brain.

When the patient ſhall be ſo far revived as to be able to ſwallow, a ſtrong purging potion of the tinctura ſacra, quickened with two or three drachms of tinctura jalapii muſt be poured down; but if, notwithſtanding the bleeding, there ſhould be no ſigns of recovery, then acrid clyſters, prepared by boiling colocynth in the decoction, and adding tinctura

tinctura veratri, and oleum ricini, muſt be thrown up without delay. And if none of theſe means ſhould rouſe the patient, bliſters muſt be laid to the legs and thighs, or an actual cautery applied to the ſoles of the feet.

Theſe are the means to be uſed when there are ſufficient reaſons to think, that the veſſels of the brain are over-loaden with blood; but when it is more likely that an accumulation of ſerum is the cauſe of the diſeaſe, then we are to be moderate as to the bleedings, or perhaps not bleed at all. And inſtead of this mode of evacuation, give ſome briſk emetic, ſuch as the ſal vitrioli, emetic tartar, or antimonial wine. If the emetic operates, and the patient is revived by it, we are to go on and empty ſtill further, by cathartics, ſuch as have been already mentioned, and apply bliſters with a view to rouſe and ſtimulate; as alſo to give proper doſes, from time to time, of the volatile alcaline ſpirits, in order, if poſſible, to raiſe ſome degree of fever, which will forward the abſorption of the ſtagnant lymph. Errhines, to provoke ſneezing, are alſo ſuppoſed to be of uſe in the apoplexia ſeroſa; whereas in the ſanguinea, neither they, nor emetics are to be uſed, for very obvious reaſons.

If the patient can be brought to himſelf within the firſt four days, we may entertain hopes of a complete recovery, and muſt direct a proper ſcheme of management for the prevention of future attacks; but if there ſhould be no remarkable amendment within that time, there will be but little proſpect

of ſhaking off the diſeaſe ; which will either deſtroy life immediately, or terminate in an incurable palſy.

In plethoric habits, care muſt be taken that the veſſels do not become too full of blood ; for which reaſon, the meals are to be light and ſparing, and the food chiefly of the vegetable kind ; the patient ſhould uſe briſk exerciſe, and not be allowed to indulge in bed, nor ſleep more than ſix or ſeven hours at a time ; ſhould lie with the head raiſed, and in a thin night-cap ; the belly is to be conſtantly kept open ; and care muſt be taken particularly with reſpect to all other natural and habitual diſcharges, leſt any of them be ſuppreſſed by expoſing the body to cold or wet, eſpecially in the feet, which ought alſo to be well rubbed every night before the patient goes to reſt.

In phlegmatic habits, where the ſolids are weak or relaxed, with inferior degrees of ſenſibility, a return of the diſeaſe will be beſt prevented by perpetual iſſues ; emetics, and cathartics being interpoſed at proper intervals . chalybeate waters, briſk exerciſe, and ſtimulating attenuants, ſuch as muſtard-ſeed, horſe-radiſh root, and ſquills, combined with the flores martiales, and the gums ammoniacum, galbanum and myrrh ; will in general, be proper in ſuch conſtitutions.

Beſide the ſanguineous and ſerous apoplexies, which are primary diſeaſes, there are other varieties, which, though they can be conſidered only as ſecondary, deſerve to be noticed ; as, the *apoplexia traumatica*, from blows on the head, or from falls occaſioning

occaſioning a concuſſion of the brain. Theſe caſes require very large and repeated bleedings, and briſk purging. And,

Apoplexia temulenta, from exceſſive drinking, or taking too much opium. The remedies in theſe caſes are acids, ſuch as juice of lemons or vinegar. Theſe are to be poured down the throat, when the patient can be rouſed ſo as to ſwallow them.

Carus.

The treatment of the *carus* is to be conducted on the ſame principles as were juſt now laid down for the apoplexy; and according as we may have moſt reaſon to ſuſpect an over-fulneſs of the blood-veſſels, or an accumulation of ſerum within the cranium, we are either to depend chiefly on large and repeated bleedings, or on bliſtering and other ſtimulants.

Lethargy.

And as to the *lethargy*, which is rather an inferior degree of apoplexy or carus, than a diſtinct ſpecies of diſeaſe, nothing further need be added reſpecting the methods of cure.

Catalepſy.

The *catalepſy* is a diſorder that very rarely occurs. The remedies propoſed for relieving it are the moſt active nervous ſtimulants and ſtrengtheners, emetics and briſk cathartics, with bliſtering and cupping; and the methods of adminiſtering theſe

are

are laid down in Hoffman, to whom we refer the reader, if he ſhould ever happen to be conſulted in a caſe of this ſort.

CHAP. II.

Of the different Degrees of Palſy, and Methods of Treatment.

IN *palſies*, though there may be a great diminution, or even total loſs of the powers of voluntary motion, and external ſenſation, yet the internal ſenſes remain, and theſe ſometimes not much impaired.

In the moſt violent degrees of palſy, the patient loſes both the power of motion and ſenſe of feeling, either of one ſide or of the lower half of the body. The firſt caſe is termed *Hemiplegia*, the latter *Paraplegia*.

Palſies, for the moſt part, ſupervene the different ſpecies of coma, eſpecially the apoplexy. They alſo ſucceed the nervous colic, as hath been formerly ſhewn, and are apt to proceed from venereal exceſſes, eſpecially in elderly men; the fumes of certain metallic ſubſtances, particularly lead and quickſilver, are alſo known to bring on palſies.

The moſt common ſpecies is the hemiplegia; and this is uſually the conſequence of an apoplectic ſtroke. It is not uncommon to ſee patients

live

live for ſeveral years in the paralytic ſtate, eſpecially if it be the hemiplegia: and even in the paraplegia, if death does not enſue within the firſt two or three weeks, it may not take place for a conſiderable time.

It is a promiſing circumſtance in paralytic caſes, when the patient feels a light degree of painful itchineſs in the affected parts; and if a fever ſhould ariſe, it bids fair to remove the palſy.

When the ſenſe of feeling remains, there is much more room to hope for a perfect recovery, than in caſes where the powers both of motion and ſenſation are loſt; but when we obſerve the fleſh to waſte, and the ſkin appear withered and dry; we may look on the diſeaſe as quite incurable. The palſy ſometimes ends in a mortification; and convulſions, for the moſt part, coming on before death, put an end to the miſery of the patient.

The diſſection of morbid bodies, beſide the appearances found in apoplectic ſubjects, has ſhewn, that in ſome who have died of inveterate palſies, the ſpinal marrow has been either waſted, or ſoaked in purulent matter.

There have been many things recommended as remedies in this diſeaſe; but it muſt be confeſſed that they are only the ſlighter degrees of palſy, which readily yield to medicine; and before any ſcheme of cure be fixed on, every circumſtance relative to the patient's habit of body, and previous ſtate of health, ſhould be carefully weighed.

If

If an hemiplegia or paraplegia ſhould ſupervene an apoplexy, in conſtitutions that give reaſon to ſuſpect the blood to be in a ſtate of too great viſcidity, a courſe of the attenuant gums, with fixed alcaline ſalts, and chalybeate waters, may be found to do ſervice; to which it will be proper to add frictions, with the volatile liniment, all down the ſpine; but in habits where the blood is rather inclinable to the watery ſtate, it will be neceſſary to give emetics from time to time; to apply bliſters, and cut iſſues.

The natural hot baths are often found uſeful in paralytic caſes; and where the patients cannot avail themſelves of theſe, an artificial bath may be tried, by diſſolving ſalt of ſteel in warm water, and daſhing it on the paralytic limbs; dry frictions alſo, or ſcourging with nettles, are recommended, and may do ſervice.

The electric ſhock has likewiſe been known to forward the recovery, and may be tried with ſafety; but it is chiefly in caſes of local paralyſis that we are to expect much from this laſt-mentioned remedy.

When palſies ſucceed other diſeaſes than the apoplexy, the methods will require to be ſomewhat varied according to the nature of the primary diſeaſe, whether it be rheumatiſm, ſcurvy, ſcrofula, lues venerea, or nervous colic.

There is no great neceſſity for making more diſtinctions of the palſy than thoſe above-mentioned:

tioned: if the reader is desirous of seeing more, he may consult Sauvages.

CHAP. III.

Different Species of Fainting, and Methods of Treatment.

WE may distinguish three species of fainting:

I. *Leipothymia*; wherein there is a sudden and total failure of strength, but the patient does not entirely lose all sense; and though there be coldness and paleness, yet the pulse continues to beat.

II. *Syncope*; wherein there is a sudden and total loss of all the powers of sense and motion, with coldness and paleness, and a suspension of the subsultory motions of the heart and arterial system; but the patient does not remain long in this state, death either ensuing, or a revival.

III. *Asphyxia*; wherein there are the same appearances as in the syncope, but of much longer duration; the patient all the while lying like a corpse.

Here we are to call to mind what was said in the theoretical part, concerning the motions of the heart and arterial system; namely, that there is not only a systaltic motion, or simple contraction and dilatation, but that there is moreover a subsultory motion, which causes the beating of the heart,

heart, and contributes to the pulsation of the arteries.

As we cannot suppose life to subsist without some freedom of circulation, so in cases of syncope and asphyxia, it is presumed that the blood is carried through the vessels merely by the systaltic motion; and that the subsultory is suspended during the time persons remain in a fainting fit.

Each of the three species of fainting may proceed from various sources; whence different varieties, which may require some difference in the treatment.

The *leipothymia* is sometimes the consequence of violent passions of different kinds, but it proceeds much oftener from somewhat offensive in the stomach.

When persons of a full habit faint through excess of passion, they ought to be blooded without delay, and should drink vinegar or lemon juice diluted with water; and, after the bowels are emptied by a clyster, take a paregoric draught, and go to bed.

The passion of anger, in a peculiar manner, affects the biliary secretion, causes an oppression at the stomach, with nausea and retching to vomit, and a bitter taste in the mouth, with giddiness; these symptoms seem to indicate an emetic, which, however, in these cases must be carefully avoided, as it might endanger the patient, by bringing on an inflammation of the stomach.

The

The general effects of a ſudden fright have been mentioned on a former occaſion. When theſe are ſo violent as to require medical aid, our firſt endeavours muſt be to take off the ſpaſmodic conſtriction, and reſtore freedom to the circulation; by bleeding, if the habit be at all inclined to fulneſs; and by giving a mixture, with equal parts of the vinum antimoniale and elixir paregoricum, in ſome agreeable vehicle, which will bring on ſleep and encourage perſpiration. It was formerly mentioned, that convulſions, or even an epilepſy, may be brought on by frights; which ſhould make people cautious of playing fooliſh tricks in this way.

When a ſurfeit, or any ſpecies of ſaburra, occaſions a leipothymia, an emetic is the immediate remedy, as ſoon as the patient, by the help of acrid ſtimulants, ſhall be ſo far rouſed as to be able to ſwallow one: in theſe caſes, tickling the fauces with a feather dipt in ſpirit of hartſhorn, will be proper, not only to rouſe the patient, but alſo to bring on vomiting.

A *ſyncope* is moſt commonly brought on by profuſe diſcharges or evacuations, either of the blood or of the ſecreted humours.

In order to revive the patients, they ought to be laid along in a horizontal poſture, in an airy place; the legs, thighs, and arms, are to be rubbed with hot flannels; very ſtrong vinegar, or ſalt of hartſhorn, or the ſpirit of this, or of ſal ammoniac, are to be held to the noſtrils, and rubbed into them, or being properly diluted poured down the throat; cold water is to be ſprinkled on the face and

and neck; and when by these means the patient shall be sufficiently revived, wine boiled up with some grateful aromatic, is to be given in the proper quantity. *

When a syncope is the consequence of the too violent operation of either an emetic or cathartic, the tinctura thebaica, mixed with spiced wine, is the most efficacious remedy; but the opiate must be given gradually, and in very small doses.

A syncope, or even asphyxia, wherein the patient shall lie for several hours, is frequent in hysteric constitutions, and during the fit requires fetid antispasmodics, together with acrid stimulants: to prevent returns, nothing answers better than the cortex joined with chalybeates.

It is not necessary to spend much time about the *asphyxia*, since the methods of treatment may be collected from what has been already said: to which we may add, that in cases of *syncope à mephitide*, or those sudden faintings and suffocations that are caused by going down into wells or vaults that are full of that noxious kind of vapour, which, on other occasions, is termed *Fixed Air*; the only way to save life is, to drag the body out into the fresh open air, and dash cold water on it; rub vinegar to the nostrils, and if possible pour it down the throat;

* In the fainting consequent upon profuse uterine hæmorrhages, it will be a safer practice to abstain from all heating, and stimulant things; as life, in these cases, is preserved by the coagulation of the blood in the extremities of the open vessels; which might be prevented, by the pouring in hot wine, or volatile alcaline spirits.

throat; the *ſyncope à fumis*, from being ſhut up in a room, where charcoal is burning; and the *ſyncope à muſto*, which is brought on by going into cellars full of liquors in high fermentation, are to be treated preciſely in the ſame way.

Drowned perſons are ſometimes (and if immediate care were taken, might frequently be) recovered, by rubbing the limbs, and trunk of the body with hot ſalt, or aſhes; at the ſame time blowing into the trachea, by means of a tube, bent like a catheter; and forcing the fume of tobacco into the anus, by an inſtrument contrived for that purpoſe; all with a view to put the blood, which is ſtagnant in the large veſſels united to the heart, in motion, and thereby ſtimulate this muſcle to renew its action: veins muſt be opened in ſuch places as are moſt likely to yield blood, as ſoon as any ſigns of revival appear. *

People who have been hanged, or ſtrangled, if the vertebræ of the neck happen not to be diſlocated, have ſometimes been reſtored to life by immediate bleeding, blowing in the fume of tobacco, and ſtrong friction, as have been juſt now directed, in the caſe of perſons drowned.

A METHO-

* Of late years ſocieties have been formed, in different large cities, for the purpoſe of diſtributing premiums, to thoſe who give immediate aid in recovering drowned perſons; and many lives have been preſerved, in conſequence of theſe humane inſtitutions. It is a pity that ſo beneficent a ſcheme has not yet been eſtabliſhed in Dublin, as there are few places where accidents of this kind more frequently happen.

A

METHODICAL INTRODUCTION

TO THE

PRACTICE

OF THE

ART OF MEDICINE.

BOOK VII.

ASTHMATIC DISEASES.

CHAP. I.

Of the Hydrothorax, and Empyema.

DR. Lieutaud, who had much experience in opening morbid bodies, tells us that a dropſy of the cheſt is a more frequent diſeaſe than is uſually imagined; it being very difficult, for the moſt part, to know when there is water contained in the cavity of the thorax, and therefore the caſe paſſes for a common dyſpnœa. But we may preſume there is water here, when the breathing, which at beſt is difficult and frequent, becomes much more ſo when the

the patient lies along in a horizontal poſture ; ſo that at firſt going to bed he can ſcarcely reſt, or if he does ſleep, is not refreſhed by it ; and therefore is often obliged to ſit up in bed, and to ſleep in that poſture, leaning forward ; when joined to theſe, there is a ſenſe of weight and pain at the pit of the ſtomach, ſometimes ſhooting up to the ſhoulder of the ſide affected ; and when the hand and arm of that ſide puff up with an œdematous ſwelling, we may conclude that there is water lodged in the cavity of the thorax.

But the moſt certain ſign of all is, when we can actually hear the undulating noiſe of the water, upon ſtriking the ribs. Sometimes the water is confined ſolely to the pericardium, which being preternaturally diſtended, oppreſſes the lungs, and will not allow them to be dilated.

Theſe caſes are uſually attended with hectic heats and maraſmus, and, toward the cloſe, a colliquative diarrhœa for the moſt part hurries off the patient.

The hydrothorax is a very dangerous diſeaſe, and ſeldom admits of cure ; for if we cannot ſucceed in diverting the ſtagnant ſerum to the kidneys, and carry it off by urine, there is little room to hope for a recovery, ſince the ſtronger cathartics, which ſometimes anſwer in other dropſies, are ſeldom of any ſervice in this caſe, but contribute to the further waſting of the fleſh. Diuretics therefore are what we are chiefly to depend on. Squills infuſed

infuſed in wine, together with ſmall doſes of ſome antimonial preparation, will probably increaſe the diſcharge by urine.

Iſſues, in the thighs, or perpetual bliſters, on the legs, will tend greatly to relieve the cheſt, and may ſerve, in ſome meaſure, to drain off the ſerum. But as the laſt reſource, it is recommended by authors to make a puncture into the thorax. The place for the aperture is between the ſixth and ſeventh ribs, in the middle ſpace between the ſpine and the ſternum. If the dropſy happens to be confined ſolely to the thorax, the operation may ſucceed; but this is rarely the caſe.

EMPYEMA.—This operation alſo will have a better chance for ſucceſs, when the confined fluid is of the watery kind, than when it is purulent; for if the pus ſhould have come from an abſceſs that has burſt, unleſs this abſceſs ſhould have pointed outwardly, and the lungs adhere to the pleura in that place, ſo as to let none of the matter ſlip in between them and this membrane, there is very little to be hoped for from the operation.

It was formerly obſerved, that collections of purulent ſerum, which have come from the ſurfaces of inflamed membranes, where there is no ulceration, or breach in the ſolids, are often found in the thorax after death; and we may infer that ſuch a collection is actually there, if the ſigns juſt now mentioned, as pointing out the hydrops pectoris, be all preſent, and have come on after an inflammation of the internal parts of the thorax; that is

to ſay, if there be an enlargement of the cavity, and an œdematous fulneſs of the ſkin and fleſh of one ſide of the cheſt, with a perpetual dry cough, while the patient cannot breathe eaſily but when he ſits up, and leans forward. Theſe ſigns may ſerve to ſhew that there is an *empyema* or collection of purulent matter, which bold practitioners may poſſibly adviſe to be let out.

If the patient ſhould ſubmit to the operation, and ſurvive it, he muſt be managed as was directed in the caſe of a phthiſis, from an ulcer of the lungs.

CHAP. II.

Of the Dyſpnœa, Orthopnœa, and Aſthma; different Species and Methods of Treatment.

Dyſpnœa.

BY the term *dyſpnœa* we underſtand an habitual difficulty of breathing; which as it may proceed from a variety of ſources, may be diſtinguiſhed into a number of ſpecies; as,

1. *Dyſpnœa pituitoſa*; when the cellular part of the lungs is overloaded with a ſerous fluid, ariſing from a dropſical habit, and failure of power in the valvular lymphatics, to abſorb the lymph from theſe cells. This diſeaſe will be known by the pale and bloated look of the patient; by the ſwelled legs; ſmall quantity of urine; weak pulſe; general chillineſs, and feebleneſs. The things which bid

bid faireſt to give relief are the attenuant gums, with ſoap, ſquills, horſe-radiſh root, and muſtard-ſeed, and a ſmall proportion of emetic tartar, or ſome other antimonial preparation. Bliſtering on the legs, provided they be not œdematous, is often found to give immediate eaſe in this ſpecies of the dyſpnœa.

2. *Dyſpnœa à tuberculis*; when ſhortneſs of breath ariſes from tubercles, as they are termed, or a ſchirrous enlargement of the lymphatic glands, which are diſperſed through the lungs. This ſpecies is commonly found in ſcrofulous habits, and may be diſtinguiſhed by the concomitancy of thoſe external ſwellings, and appearances which particularly mark the ſcrofula.

This ſpecies of dyſpnœa generally ends in a phthiſis. Courſes of goat's whey, and of ſea-water, have been known to do ſervice; but it muſt be confeſſed, that a perfect cure is ſeldom obtained. Iſſues are of uſe in theſe caſes, as they appear to prevent the ill effects of an over-fulneſs, if it ſhould happen at any time to ſupervene.

3. *Dyſpnœa calculoſa*, from earthy concretions formed in the lungs. The ſpitting up of theſe ſubſtances is the only thing that can enable the phyſician to diſtinguiſh the ſpecies. Perhaps a courſe of fixed alcaline ſalts, and lime-water, might do ſervice in theſe caſes.

4. *Dyſpnœa phyſconialis*. A ſhortneſs of breath muſt neceſſarily follow a diſtenſion of the abdomen, from whatever cauſe this may happen to ariſe; and the methods of relief muſt be adapted accord-

ing to the nature of the phyſconia, which oftentimes is not eaſy to determine.

5. *Dyſpnœa ſcorbutica.* When ſhortneſs of breath proceeds from a ſcorbutic acrimony, the cure muſt depend on that of the original diſeaſe; and will be laid down in its proper place. The preſence of the other ſymptoms, which particularly mark the putrid ſcurvy, will ſerve to diſtinguiſh this ſpecies of the dyſpnœa.

Orthopnœa.

By the term *Orthopnœa* is meant an accidental, and extreme difficulty of breathing, independent of inflammation; ſo great as to oblige the patient to ſit upright; whence the name of the diſeaſe. It differs from the dyſpnœa, in being an acute diſeaſe, which ſoon terminates either in death or recovery; and from the aſthma, in not returning at intervals.

We are to diſtinguiſh two ſpecies of orthopnœa:

1. That which is *idiopathic*, and depends on diſorders immediately affecting the lungs; and,

2. That which is only *ſympathetic*, and ariſes from ſome remote nervous diſturbance, producing difficulty of breathing through ſympathy.

There are two principal varieties of the *orthopnœa idiopathica*; namely, the diſeaſes termed *Catarrhus Suffocativus*, and *Peripneumonia Notha.*

The

The *catarrhus ſuffocativus* is ſuppoſed to conſiſt in a ſpaſmodic affection of the bronchia. This diſeaſe is often met with in children, and ſeems epidemic in ſome ſeaſons; but it uſually proves fatal, before medical aſſiſtance can be procured.

The attack is violent and ſudden, and generally in the night: this circumſtance, together with a particular ſort of ſhrill croaking, which accompanies the quick and difficult breathing, may ſerve to diſtinguiſh this diſeaſe from an inflammation of the lungs, which always comes on more gradually, and is not accompanied with this kind of noiſy reſpiration.

It is of much conſequence to make this diſtinction, becauſe bleeding does harm; and the only proſpect, when aid is called in time, is from bliſtering the back, injecting clyſters with aſafœtida, and pouring a ſolution of the ſame gum down the throat. Theſe remedies may ſometimes happen to ſave life. Afterwards, when the paroxyſm ſhall be entirely at an end, the cortex is to be given freely, in order to prevent a relapſe. Dr. Millar, in his late obſervations on the aſthma, ſays, That in theſe caſes he has given, by the mouth, to the quantity of an ounce of aſafœtida, in the ſpace of forty-eight hours, to a child of eighteen months old; and, during the ſame time, has injected almoſt as much by clyſter, allowance being made for the reſiduum which was left in making the ſolution. We have not yet found any patient, ſo young who could be got to take ſuch a quantity of this medicine, in a like ſpace of time; but can vouch for

for its good effects, though given in ſmaller doſes than what the gentleman above-mentioned propoſes.

The *peripneumonia notha*, or baſtard peripneumony, is a very different diſtemper from the *peripneumonia vera*; as there is neither extraordinary heat, pain, or thirſt; and whereas the true inflammatory peripneumony generally attacks the robuſt, vigorous, and active, and is moſt frequent in cold dry weather, during north-eaſt winds, and high ſtations of the barometer; ſo this baſtard peripneumony commonly ſeizes the old and phlegmatic, the weak and lax, the fat and unwieldy, and is moſt rife in wet and ſlabby ſituations, and in foggy weather, and winter ſeaſons: circumſtances which all point out, as the cauſe, an accumulation of ſerum in the cellular cavities of the lungs; whence great oppreſſion on the air-veſſels, and ſome degree of obſtruction in the pulmonary and bronchial arteries, thereby hindering the free and regular circulation of the blood.

This is a diſeaſe which is always extremely dangerous, and requires the utmoſt circumſpection in regard of the prognoſtic that is to be made; as the mildneſs of the ſymptoms, at the beginning, is too apt to deceive both the patient, and the phyſician. For, as the accumulation is formed among the inert ſolids, the ſymptoms do not appear very diſtreſſing until it is generally too late to remedy them; and there can be no hope of a reſolution of the offending matter, ſince there is no way for it to be carried off from the cells where it

it ſtagnates, but by the abſorbent veins; and it is generally too viſcid to be taken up by ſuch ſlender veſſels. Whereas, if the morbific matter were mixed with the circulating fluids, in the bronchial or pulmonary blood-veſſels, then there might be ſome chance of its being thrown off in the way of expectoration, or by ſome other critical diſcharge.

Writers, from not making the neceſſary diſtinction between the cellular, and the tubular part of the lungs, and by ſuppoſing that the offenſive matter, in the baſtard peripneumony, chokes up the extremities of the pulmonary artery, have confounded the theory of this diſeaſe; ſince the ſymptoms cannot be ſatisfactorily accounted for, on the ſuppoſition that this matter is lodged in any other place than the cellular interſtices; where it preſſes, both upon the air-veſſels, and the blood-veſſels; hindering the former from being fully diſtended with air, and the latter from tranſmitting the blood.

The progreſs of this diſeaſe is thus deſcribed by Sydenham: the patient grows hot and cold alternately; is giddy, and complains of an acute pain in the head, when the cough is moſt troubleſome; is very apt to puke, ſometimes with, and at other times without coughing; the urine is turbid, and the ſediment intermixed with red; the breathing is quick and with difficulty, and a remarkable wheezing may be heard by the attendants, whenever the patient coughs, ſhewing that the

the lungs are not ſufficiently dilated. A pain of the whole breaſt accompanies this diſeaſe; but there are no ſigns of fever, eſpecially in groſs habits, which Sydenham imagined happens from the abundance of the phlegmatic matter, whereby the blood is ſo ſurcharged that it cannot riſe to a perfect ebullition.

We are to obſerve, that in this diſeaſe bleeding is of no ſervice, but on the contrary, for the moſt part, found to do harm; and the beſt chance that the ſick perſon has for life, is from repeated emetics, and bliſters. The moſt proper emetic will be either ſtibiated tartar, or antimonial wine; and the patient ought not to drink much after it, ſo that the agitation from the puking may be the ſtronger: and if the bowels ſhould not happen to be kept ſufficiently open by theſe, clyſters muſt be injected, from time to time. An emulſion of balſam of Tolu, with ſpirit of hartſhorn, is generally of remarkable ſervice.

But it is ſeldom that all this will anſwer; and we may foretell the death of the patient, from the perpetual laborious wheezing, great anxiety, and intolerable oppreſſion of the præcordia, together with a conſtant doſing, coldneſs of the extremities, and a livid colour in the face and hands.

Perſons advanced in years, who are of a groſs habit and flabby texture, may perhaps be prevented from falling into this diſeaſe by ſuffering iſſues to be made between the ſhoulders; as theſe will prevent the accumulation of lymph in the cellular part of the lungs, and poſſibly prolong life.

The

The *ſympathetic orthopnœa* is alſo diſtinguiſhable into different varieties; as firſt, the

Orthopnœa hyſterica; which ſeizes perſons of the hyſteric temperament. The general ſigns of this temperament muſt ſerve to diſtinguiſh the diſeaſe. It is uſually brought on by ſome violent fit of paſſion, or proceeds from flatus, or other offenſive matter, pent up in the ſtomach, and inteſtines.

Bathing the legs in warm water, applying bliſters to them, and giving the fœtid antiſpaſmodics, ſuch as a mixture of the tinctura fuliginis, and tinctura valerianæ volatilis, will generally be found to give relief; or, if theſe do not immediately procure eaſe, clyſters of a decoction of carminative herbs and ſeeds, are to be injected, with aſafœtida, and the proper quantity of extractum thebaicum, mithridate, or theriaca andromachi diſſolved in them.

When this ſpecies of ſuffocation happens in women, it is ſuppoſed to proceed from ſome diſorder reſpecting the uterus; and the old writers entertained a notion, which is ſcarcely yet exploded among the vulgar, that the womb ſhifted its place, and roſe up toward the thorax; for which reaſon, they directed fœtids to be applied to the noſtrils, in order to drive it back again.

They alſo made no ſcruple, in theſe caſes, as well as in thoſe of the aſphyxia hyſterica, of directing means to be uſed, which would at this day be reckoned extremely odd; and require no ſmall

ſtock

ſtock of medical gravity, and authority, in the phyſician who ſhould propoſe them. *

The next variety is the *orthopnœa ſtomachica.* When a ſuffocation is known to be the conſequence of a ſurfeit, or of ſomething offenſive loading the ſtomach, (which may be collected, from carefully weighing the circumſtances of the caſe) an emetic of ſalt of vitriol is the proper remedy.

It is unneceſſary to conſider the *orthopnœa à vaporibus*, as a diſeaſe. The fumes of inflammable and ſulphureous bodies, of ſpirit of nitre, and of quick-lime, are chiefly thoſe which appear to create diſtreſs by ſuffocation. Mephitic vapours act in another manner, and, in ſome inexplicable way, inſtantly deſtroy the healthy craſis of the animal fluids; for the bodies of people who periſh from being expoſed to mephitic vapours, immediately ſwell, the blood burſts from the veſſels, and in a ſhort ſpace of time ſhews ſtrong marks of putrefaction.

The other varieties of orthopnœa, which might be mentioned, are all, or moſtly ſymptomatical, and depend on other diſeaſes; conſequently do not require a diſtinct conſideration.

Aſthma.

* Witneſs the following hiſtory, related by Duretus.

" Ego nuper vocatus ſum, media nocte, ad curationem mu-
" lieris, quæ ab hyſterica ſuffocatione laborabat et conciderat
" quaſi mortua: eam inveni frigidiorem marmore, pulſus erat
" parvus; maritus aderat, de uxoris ſalute valde ſolicitus.
" Bene eſt dixi, juſſi ut rem cum uxore ſua haberet; rem ha-
" buit, indeque ſtatim convaluit." See alſo Hollerius; and Riverius, in Capite de Hyſterica Paſſione.

Aſthma.

The *aſthma* is a chronic diſeaſe, which may continue to give very great diſtreſs at intervals, for a conſiderable number of years. Sir John Floyer, when he wrote his celebrated treatiſe, had laboured under repeated paroxyſms for thirty years.

The common diſtinction is into *humid* and *dry*; the former is accompanied with an expectoration of mucus or purulent matter, but the latter is not ſo attended. In the genuine humoral aſthma the patients are obliged to lean forward; the inſpiration is ſhort and ſpaſmodic; and the expiration very ſlow.

Aſthmatic perſons have generally ſome warning of the attack, from a languor, loſs of appetite, oppreſſion, and ſwelling of the ſtomach from flatulence, which precede the fit; but it is uſually in the middle of the night, that the violent difficulty of breathing comes on.

The duration of the paroxyſm is uncertain, as it will ſometimes terminate in three or four hours, while at other times it ſhall continue for as many days; nay, a very experienced practitioner has known it laſt three weeks, without intermiſſion; but while it ſubſiſts, the patient is in very great diſtreſs, not being able to lie in bed, nor ſcarcely to ſpeak or expectorate, ſo great is the difficulty of breathing; and yet, notwithſtanding all this apparent interruption to the free paſſage of

of the blood through the lungs, an inflammation here, ſeldom or ever ſupervenes a fit of the aſthma. As the paroxyſm wears off, and the breathing becomes free, there is more or leſs of an expectoration of mucus; and the urine, from being pale and limpid, becomes high-coloured, and lets fall a copious ſediment.

In order to obtain relief in the fit, we muſt ſometimes bleed, unleſs extreme weakneſs or old age ſhould forbid, and repeat it according to the degrees of ſtrength and fulneſs: a purging clyſter, with a ſolution of aſafœtida, muſt be immediately injected; and if the violence of the ſymptoms ſhould not ſpeedily abate, it will be proper to bliſter the nape of the neck.

In the height of the paroxyſm, an emetic might be followed by dangerous ſymptoms, as it would increaſe the accumulation of blood in the veſſels of the head; but vomiting will often prevent a fit of the aſthma, eſpecially if the ſtomach ſhould chance to be loaden with any ſort of ſaburra. A very ſtrong infuſion of roaſted coffee has been found to give eaſe in an aſthmatic paroxyſm.

In the intervals of the fits, perſons ſubject to the aſthma, eſpecially of the humid ſpecies, ſhould take emetics * from time to time, and ſhould uſe the lac ammoniaci, with a due proportion of oxymel

* An infuſion of tobacco is an emetic that has been found very ſerviceable in ſome aſthmatic caſes; and ſmoaking, or chewing the ſame, has been known to prevent the frequency and ſeverity of the paroxyſms.

mel ſcilliticum and vinum antimoniale, with a view to promote expectoration; or the gum ammoniac, and others, of ſimilar virtues, may be formed into pills, and combined with ſoap, as before-mentioned for the dyſpnœa pituitoſa; or a maſs may be compoſed of aſafœtida and balſam of Tolu, with ſyr. ex allio; and theſe pills may be waſhed down by a medicated wine, impregnated with ſquills, horſe-radiſh-root, and muſtard-ſeed; or a ſtrong bitter infuſion, with a little antimonial wine.

In ſome caſes crude mercury will be found ſerviceable; in others, flowers of ſulphur, made into an electuary with honey, or ſyrup of garlic; and if, notwithſtanding the uſe of theſe things, a coſtive habit ſhould prevail, it will be neceſſary, from time to time, to give a few grains of the pil. rufi, ſoap and aloes, or a maſs of equal parts of rhubarb, ſcammony, and ſoap.

The *dry*, or *ſpaſmodic aſthma*, during the extreme violence of the fit, is beſt relieved by opiates; and ſometimes very large doſes are required. But in order to obtain permanent relief, nothing is found to anſwer better than the radix ipecacuanhæ, in ſmall doſes. Three, five, eight, or ten grains, according to the ſtrength and conſtitution of the patient, given every other day, have been productive of the happieſt effects; acting, ſometimes, as an evacuant, pumping up the viſcid phlegm; at others, as an antiſpaſmodic or ſedative. (See Dr. Akenſide's paper in the 1ſt vol. Medical Tranſactions, page 93.) Iſſues are generally recommended

mended in both ſpecies, and will often be found uſeful.

Changes of weather are uſually felt very ſenſibly by aſthmatic people, who in general cannot live with tolerable eaſe in the atmoſphere of large cities; though we ſhall ſometimes meet with patients who agree better with this air, which is ſo replete with groſs effluvia of various kinds, than with the pureſt that can be found in country ſituations. And ſome are found who breathe with moſt eaſe in a crowded room, with a fire and candles.

A light diet of meats that are eaſy of digeſtion, and not flatulent, is requiſite for aſthmatic people, and the exerciſe of riding is indiſpenſibly neceſſary.

When the aſthma is found to depend on ſome other diſeaſe, whether it be the gout, or an intermittent fever, or when it proceeds from the ſtriking in of ſome cutaneous eruption, regard muſt always be had to the primary diſeaſe: thus, in the *aſthma arthriticum*, ſinapiſms to the feet, or bliſtering, will be abſolutely neceſſary, in order, if poſſible, to bring on a fit of the gout. And when the dregs of an ague give riſe to an aſthma, which is termed *Febriculoſum*, and invades at regular intervals, we muſt have recourſe to the cortex.

The *aſthma exanthematicum* will require bliſters or iſſues, to give vent to the acrid matters which were repelled from the ſurface of the

the body, and courſes of ſulphureous waters, goat's whey, and ſweetening diet drinks, or perhaps mercurial alteratives, in order to correct the ſharpneſs of the juices.

CHAP. III.

Of the Angina Pectoris: Hiſtory of a caſe ſucceſſfully treated. *

BEFORE the publication of the ſecond volume of the Medical Tranſactions, in 1772, the diſeaſe which Dr. Heberden has named *Angina Pectoris*, (from its ſeat, and the ſenſe of ſtrangling and anxiety that attend it;) was unknown to the faculty at large, † as none of the experienced practitioners who muſt have met with caſes, had ever

* In the theoretical part, the *Angina Pectoris* was claſſed with the ſpaſmodic diſeaſes, on a preſumption of its being a ſpaſm of the heart: but as the diſtinguiſhing ſymptom is conſtriction acroſs the cheſt, accompanied with a ſenſe of choaking or ſtrangling, it falls in moſt naturally with the preſent order; for in claſſing diſeaſes, we ſhould always arrange them according to their evident and predominant ſymptoms, regardleſs of the cauſe, which very often is not within the reach of our inveſtigation.

† Sauvages includes under the title Cardiogmus, all the different diſorders that depend on aneuriſms of the great blood-veſſels, enlargement of the ventricles of the heart, oſſification of the valves, preternatural accumulation of fat about theſe parts, &c. and ſome of the hiſtories come near the Angina Pectoris. See 4to Edit. vol. 2. pag. 85.

ever thought proper to communicate their obſervations, until the very eminent and learned Phyſician juſt now mentioned, embraced that opportunity, and gave ſuch a deſcription as now leaves people under no difficulty to diſtinguiſh this very alarming malady; for ſuch it may be juſtly termed, as being the moſt mortal in all the records of phyſic, with this terrible circumſtance annexed, that the patient generally dies in a very ſudden manner. With gout, or cancer, many have lived to a great age, and ſome have recovered from the worſt kinds of peſtilence; but not a ſingle perſon (as far as we are informed) out of, at leaſt, four-ſcore, (ſeen at different times * by different gentlemen of the profeſſion) has been cured of this diſeaſe, in England; except one young man, in whom the diſorder was of no long ſtanding, and the ſymptoms neither numerous, nor violent; and even the method of cure that was then found ſucceſsful, though in the hands of an admirable phyſician, has not, in the courſe of twenty years, reſtored another perſon to health.

In

* When Dr. Heberden firſt took notice of this diſtemper, and could find no ſatisfaction from books, he conſulted a phyſician of long experience, who told him, that he had known *ſeveral* ill of it, and that *all of them* had died ſuddenly. The doctor himſelf ſays he has ſeen at leaſt *fifty* caſes, in the courſe of his practice; Dr. Wall, *twelve*, or *thirteen*; and Dr. Fothergill, though he does not ſpecify the number, complains that he has met with it but *too often*. To which we may add the ſolitary caſes obſerved by Dr. Percival, and Dr. Haygarth, and that of the unknown gentleman who wrote the letter to Dr. Heberden.

In this country, we have heard of no more than eight or ten inſtances of this diſtemper; the laſt of which, accompanied with the moſt alarming ſymptoms, and in an advanced ſtate, was conducted on a new plan of treatment, with perfect ſucceſs; as will appear from the hiſtory, that we ſhall annex.

The appearance of Dr. Heberden's paper (to which we refer) very ſoon raiſed the attention of the faculty, and produced other obſervations from phyſicians of eminence*; it alſo, induced an unknown ſufferer under the diſeaſe, to write the doctor a very ſenſible letter, deſcribing his feelings in the moſt natural manner; which, unfortunately, in three weeks, after the date of this anonymous epiſtle, terminated in a ſudden death; as the writer himſelf apprehended.

From all theſe the following hiſtory is compiled.

It is a circumſtance worthy of obſervation, that the perſons who have been found labouring under the Angina Pectoris, were *all men*, and almoſt all of them, above fifty years old; moſt of them with a ſhort neck, and inclining to be fat. Dr. Heberden once obſerved ſomething like it in a woman who was paralytic, and has heard one or two young

* Namely, Dr. Fothergill; Dr. Wall, of Worceſter; Dr. Haygarth, of Cheſter; and Dr. Percival of Mancheſter. See the Medical Obſervations, 5th vol. articles XXI. and XXII. Medical Tranſactions, 3d vol. art. I. II. and VI. and Medical Commentaries, 3d vol. page 181.

men complain of it in a ſlight degree. The youngeſt ſubject that Dr. Fothergill ever ſaw afflicted with this diſorder, was about thirty years of age, and this was the perſon, who is mentioned already, as having been cured; the method that ſucceeded with him, was a courſe of pills, compoſed of the maſs of gum pill, ſoap, and native cinnabar; with a light chalybeate bitter: this was continued for ſome months, after which he went to Bath, ſeveral ſucceſſive ſeaſons, and acquired his uſual health: he was ordered to be very ſparing in his diet; to keep the bowels open; and to uſe moderate exerciſe on horſeback; but not to take long, or fatiguing walks.

The only ſymptom, in this patient, that is mentioned, was a ſtricture about the cheſt, which came on, if he was walking up hill, or a little faſter than ordinary; or if he was riding a very briſk trot; for moderate exerciſe of any kind, did not affect him: and this uneaſy ſenſation always obliged him to ſtop, as he felt himſelf threatened with immediate death if he had been obliged to go forward.

It is this ſharp conſtrictive pain acroſs the cheſt, that (according to Dr. Fothergill's obſervation) particularly marks this ſingular diſeaſe, and which is apt to ſupervene a certain degree of muſcular motion, or whatever agitates the nervous ſyſtem.

The ſternum, is uſually pointed to, as the ſeat of this pain; but it is felt differently, in different ſubjects, at the upper, middle, or lower part; and, in general, it extends itſelf and ſtrikes into one, or both arms, and excites a ſharp pain there, deſcribed

ſcribed like a cramp; in the greater number, in both arms, and above the elbow, at the place where the pectoral muſcle is inſerted into the os humeri; but in the patient, whoſe caſe will be deſcribed hereafter, this pain was felt in the fore arm, exactly at the inſertion of the pronator teres.

Though, in general, the paroxyſm invades while the perſons are in motion, eſpecially walking, and after a full meal; yet, in ſome caſes, it has been known to attack them when ſtanding ſtill; or when ſitting, or even lying in bed; and then, Dr. Heberden has known the fit to continue for an hour or two; and he once met with a caſe, where the paroxyſm held for ſeveral days; during all which time, the patient ſeemed to be in imminent danger of death.

In one or two inveterate caſes, he knew the fit to be brought on by the motion of a horſe, or a carriage, or even by ſwallowing, coughing, going to ſtool, or ſpeaking; or by any diſturbance of mind. In like manner Dr. Wall's patient, toward the cloſe of his life, could not exert even the ordinary motions of his limbs, or ſtrain in going to ſtool, without bringing on a violent dyſpnœa, or ſenſe of ſuffocation. In general, however, the moſt of thoſe whom Dr. Heberden has ſeen, were perfectly unaffected with riding in any manner, with ſpeaking, ſwallowing, laughing, ſneezing, or vomiting; one has told him, that the complaint was greateſt in winter; another that it was aggravated by warm weather; while in the reſt the ſeaſons were not ſuſpected of making any difference.

In ſuch caſes as fell under the inſpection of Dr. Fothergill, he very ſeldom met with one that was not attended with an irregular, and intermitting pulſe; not only during the exacerbations, but often when the patient was free from pain, and at reſt; but Dr. Heberden obſerves, that the pulſe is, at leaſt ſometimes, not diſturbed, and mentions his having once had an opportunity of being convinced of this circumſtance, by feeling the pulſe during the paroxyſm.

But no doubt theſe varieties, as well as many other little circumſtances, will occur in this diſeaſe as they do in every other, on account of the diverſity of the human frame; for as no two human bodies are preciſely alike, how can we expect but that there ſhould be a diverſity of ſymptoms? and if thoſe which in general are found to predominate, and give the diſtinguiſhing character, be preſent, they will always authorize us in giving the name to the diſeaſe; thus, when we find the conſtrictory pain acroſs the cheſt, accompanied with a ſenſe of ſtrangling, or ſuffocation; and ſtill more, if this pain ſhould ſtrike acroſs the breaſt into one, or both arms; we ſhall not heſitate to pronounce, the caſe, an Angina Pectoris.

As to the nature of this diſeaſe, it appears to be purely ſpaſmodic; and this opinion will readily preſent itſelf to any one who conſiders the ſudden manner of its coming on, and going off; the long intervals of perfect eaſe; the relief afforded by wine, and ſpirituous cordials; the influence which paſſionate affections of the mind have over it; the

eaſe

eaſe which comes from varying the poſture of the head and ſhoulders, or from remaining quite motionleſs; the number of years which it will continue, without, otherwiſe, diſordering health; its bearing ſo well the motion of a horſe or carriage, which circumſtance often diſtinguiſhes ſpaſmodic pains from thoſe which ariſe from ulcers; and laſtly, from its coming on for the moſt part after a full meal, and in certain patients at night, juſt after the firſt ſleep, at which time the incubus, convulſive aſthma, and other ills, juſtly attributed to the diſordered functions of the nerves, are peculiarly apt to return, or to be aggravated.

But though it ſhould be admitted, that the whole diſtreſs in theſe caſes ariſes from ſpaſm, it may not be ſo eaſy to aſcertain the particular muſcles which are thus affected.

The violent ſenſe of ſtrangling or choaking, which ſhews the circulation through the lungs to be interrupted during the height of the paroxyſm; and the peculiar conſtrictive pain under the ſternum, always inclining (according to Dr. Heberden's obſervation) to the left-ſide; together with that moſt diſtreſſing and alarming ſenſation, which, if it were to increaſe or continue, threatens an immediate extinction of life; might authorize us to conclude that the heart itſelf is the muſcle affected: the only objection to this idea, and, if it had been conſtantly obſerved, it would be inſurmountable, is that the pulſe is not always interrupted during the paroxyſm: the appearances, in two of the diſſections, favour the opinion that the ſpaſm affects

fects the heart; as in one ſubject the left ventricle (and though it be not mentioned, we may preſume the right one alſo) was found as empty of blood as if it had been waſhed; and in another the ſubſtance of the heart appeared whitiſh, not unlike a ligament; as it ſhould ſeem in both caſes, from the force of the ſpaſm, ſqueezing the blood out from the veſſels and cavities.

If this hypotheſis be allowed, we muſt conclude, that the ſpaſm can only take place in an inferior degree, as long as the patient continues to ſurvive the paroxyſm; ſince an affection of this ſort, and in this part, of any conſiderable duration or violence, muſt inevitably prove fatal: and accordingly, as far as could be traced, the perſons who have been known to labour under this diſeaſe, have, in general, died ſuddenly.

The diſſections alſo ſhew, that whatever may be the true ſeat of the ſpaſm, it is not neceſſary for the bringing of it on, that the heart, or its immediate appendages, ſhould be in a morbid ſtate; for in three, out of the ſix that have as yet been made public, theſe parts were found in a ſound ſtate.

On opening the body of the poor gentleman who wrote the letter to Dr. Heberden, "upon "the moſt careful examination, no manifeſt cauſe "of his death could be diſcovered; the heart, in "particular, with its veſſels and valves, were all "found in a natural condition." *

In

* This perſon often felt when ſitting, ſtanding, and at other times in his bed, what he thought he could beſt expreſs by calling

In the caſe communicated by Dr. Percival to the publiſhers of the Medical Commentaries, "the heart, and aorta deſcendens were found in a "ſound ſtate." And in Dr. Haygarth's patient, "on opening the thorax, the lungs, pericardium "and heart appeared perfectly ſound." Not to mention Dr. Fothergill's patient, (R. M.) in whoſe body the only morbid appearance about the heart was a ſmall white ſpot near the apex. So that the cauſe, whatever its nature might have been, was at too great a diſtance, or of too ſubtile a nature to come under the inſpection of the anatomiſt. But there was a circumſtance, in two of the ſubjects, that is worthy of remembrance; and which ſhews that the craſis of the blood, while they were living, muſt have been greatly injured, namely, its not coagulating, but remaining, of a cream-like conſiſtence, without any ſeparation into ſerum and craſſamentum.

From all that we have hitherto ſeen publiſhed, it does not appear that any conſiderable advances had been made towards the actual cure of this anomalous ſpaſm.

The very judicious, and attentive Dr. Heberden, (to whom the public are highly obliged for firſt making the diſorder known) confeſſes, that bleeding,

ing it an univerſal pauſe within him of the operations of Nature, for perhaps three or four ſeconds; and when ſhe reſumed her functions, he felt a ſhock at the heart, like that which one would feel from a ſmall weight being faſtened by a ſtring to ſome part of the body, and falling from the table to within a few inches of the floor.

bleeding, vomits, and other evacuations have not appeared to do any good; wine and cordials taken at bed time, will ſometimes prevent or weaken the fits; but nothing does this ſo effectually as opiates: in ſhort, the medicines uſually called nervous or cordial, ſuch as relieve, and quiet convulſive motions, and invigorate the languiſhing principle of life, are what he recommends.

Dr. Wall mentions one patient, out of the twelve or thirteen, that he had ſeen, who applied to him early in the diſeaſe, and was relieved conſiderably by the uſe of antimonial medicines joined with the fœtid gums: he was ſtill living, at the time the doctor wrote his paper, (November 1772) and going about with tolerable eaſe. Two were carried off by other diſorders; all the reſt died ſuddenly.

Dr. Fothergill's directions are chiefly calculated with the view to prevent the diſorder from gaining ground, and to alleviate preſent diſtreſs. Accordingly he enjoins ſuch a kind of diet as may be moſt likely to prevent irritability; in particular, not to eat voraciouſly: to be particularly abſtemious in reſpect to every thing heating; ſpices, ſpirits, wines, and all fermented liquors: to guard moſt ſcrupulouſly againſt paſſion, or any vehement emotions; and to make uſe of all the uſual means of eſtabliſhing, and preſerving general health: to mitigate exceſſes of irritability, by anodynes; or pains, if they quicken the circulation: to diſperſe flatulencies when they diſtend the ſtomach, by moderate doſes of carminatives, amongſt which, perhaps,

haps, ſimple peppermint water may be reckoned one of the ſafeſt. But ſince obeſity is juſtly conſidered as a principal prediſpoſing cauſe, he inſiſts ſtrongly on the neceſſity of preventing an increaſe of fat by a vegetable diet, and uſing every other practicable method of augmenting the thinner ſecretions.

Such then are the only means of relief with which the public has hitherto been made acquainted; for, excepting the inſtance mentioned by Dr. Wall, it appears that alteratives are very little uſed in England in theſe caſes, and iſſues never.

The honour of firſt making trial of their effects, was reſerved for this country; at a time when no hiſtory of the diſeaſe, had been publiſhed, by any author, either ancient or modern.

The following caſe, wherein an alterative courſe, together with a copious drain, has effected a compleat cure, was communicated in a letter to the author, by the firſt phyſician in this kingdom, who ſtill preſerves the ſtation that he has ſo deſervedly held, near thirty years, at the head of his profeſſion; and has permitted the publication, to the end, that practitioners may be informed of the means for relieving ſufferers in a ſimilar ſtate of diſtreſs and danger; and when they conſider, that this plan of treatment has been perfectly ſucceſsful, in the only inſtance where it has been yet uſed, * it muſt excite

* Dr. Heberden's firſt publication was not until 1772, and this happened in 1770.

excite them to make a full trial of it; more eſpecially, ſince the appearance of the blood, as already mentioned, in ſome of the diſſections, ſhewed the preſence of an acrimony of the ſharpeſt kind.

The perſon whoſe caſe is here related, lives in this city, and has been viſited by the author, at the deſire of the gentleman who was pleaſed to furniſh the hiſtory. He is, at this day, in perfect health, and full of gratitude for his deliverance; the caſe was read to him, and he agreed, that it contains a moſt faithful deſcription of his paſt ſufferings; but being ſomewhat delicate, and fearing that his having an iſſue might come to the knowledge of his common acquaintances, he has requeſted that his name might not be inſerted.

A. B. a tall, well-made man; rather large than otherwiſe; of healthy parents, except that there had been a little gout in his family; temperate; being very attentive to the buſineſs of his trade (that of a watch-maker) led a life uncommonly ſedentary; had, from his boyhood upwards, been remarkably ſubject to alarming inflammations of his throat, which ſeized him, at leaſt, once in the courſe of the year; in all other reſpects well.

In 1767 (then 48 years of age) he was taken without any evident cauſe, with a ſudden and very diſpiriting throbbing under the ſternum. It ſoon afterwards increaſed, and returned upon him every third or fourth week, accompanied with great anxiety; very laborious breathing; choaking;

ing; a ſenſation of fulneſs and diſtenſion in his head; a bloated and fluſhed countenance; turgid and watery eyes; and a very irregular and unequal pulſe. The paroxyſm invaded, almoſt conſtantly, while he was ſitting after dinner; now and then he was ſeized with it in the morning, when walking a little faſter than uſual; and was then obliged to ſtop, and reſt on any object at hand: once or twice it came on in bed; but did not oblige him to ſit up, as it was then attended with no great difficulty in breathing. In the afternoon fits, his greateſt eaſe was from a ſupine poſture; in which he uſed to continue motionleſs for ſome hours, until, quite ſpent and worn out with anguiſh, he dropt into a ſlumber. In the intervals between theſe attacks, which at length grew ſo frequent as to return every fourth or fifth day, he was, to appearance, in perfect health.

Thus matters continued for more than two years; and various antiſpaſmodics were ineffectually tried for his relief. In 1769, there ſupervened a very ſharp, conſtrictory pain, at the upper part of the ſternum, ſtretching equally on each ſide, attended with the former ſymptoms of anxiety, dyſpnœa, choaking, &c. and with an excruciating cramp, as he called it, that could be covered with a crown piece, in each of his arms, between the elbow and the wriſt, exactly at the inſertion of the pronator teres: the reſt of the limb was quite free. The fits were ſometimes brought on, and always exaſperated, by any agitation of mind or body. He once attempted to ride o'horſeback during the paroxyſm; but the

the experiment was near proving fatal to him. The difference of ſeaſon or weather made no impreſſion on him. Still, in the intervals, his health was perfectly good; except that his eyes, which, before his illneſs, were remarkably ſtrong and clear, were now grown extremely tender; and that his ſight was much impaired: he had no flatulency of ſtomach; and his bowels were regular.

In this ſituation, Feb. 22, 1770, he applied to me for aſſiſtance. I had ſeen, I believe, eight or ten of theſe frightful caſes before: two of the patients dropt dead ſuddenly. They were men between forty and fifty years of age; and of a make ſomewhat fleſhy. The fate of the others I was not informed of; or, at leaſt, can not now recollect.

Having found the total inefficacy of bliſters, and the whole claſs of nervous medicines, in the treatment of this anomalous ſpaſm, I thought it right to attempt the correcting, or draining off, of the irritating fluid in the caſe now before us; to this purpoſe I ordered a mixture of aq. calc. mag. c. with a little of the aq. junip. c. and an alterative proportion of Huxham's antimonial wine; I put the patient on a plain, light, perſpirable diet; and reſtrained him from all viſcid, flatulent, and acrimonious articles. By purſuing this courſe, he was ſoon apparently mended; but, after he had perſiſted regularly in it for, at leaſt, two months, he kept for ſome time at a ſtand. I then ordered a large iſſue to be opened in each of his thighs: one only was made: however, as ſoon

as

as it began to diſcharge, his amendment manifeſtly increaſed; the frequency and ſeverity of the fits abated conſiderably; and he continued improving gradually until, at the end of eighteen months, he was reſtored to perfect health; which he has enjoyed without the leaſt interruption till now, except when he has been tempted (perhaps once in a twelvemonth) to tranſgreſs rules, by making a large meal on ſalted meat, or indulging himſelf in ale, or rum-punch, each of which never failed to diſorder him from the beginning of his illneſs; and, even on theſe occaſions, he has felt no more than the ſlighteſt notice of his former ſufferings; inſomuch that he would deſpiſe the attack, if it did not appear to be of the ſame ſtock with his old complaint. No other cauſe has had the leaſt ill effect on him.

Though rum was ſo conſtantly hurtful, yet punch made with a maceration of black currants in our vulgar corn ſpirit, is a liquor that agrees remarkably well with him.

He never took any medicine after the iſſue began to diſcharge; and I have directed that it ſhall be kept open as long as he lives. The inflammations of his throat have diſappeared for five years paſt; he has recovered the ſtrength and clearneſs of his ſight; and his health ſeems now to be intirely re-eſtabliſhed.

Oct. 25, 1776.

The

The angina pectoris occurs but seldom in this country. Several of our most experienced and observing practitioners, with whom the author has conversed on this subject, have never met with an instance of it; and it appears from the foregoing history, that the gentleman who must have seen it often, if it had been a common disease, has not been consulted, on that score, more than eight or ten times, in the course of near forty years practice.

Perhaps we may account for this exemption, from the difference in the general course of living. In Ireland, the lower sort may be said to live almost entirely on a vegetable diet; and they much oftener indulge in drinking spirits, than ale, or beer; whereas in England, men of all degrees, eat plentifully of animal food, and drink freely of malt liquors; and there, even many of the better rank, use these in preference to wine, or punch; while with us, every body, in any thing like easy circumstances, uses either wine or punch; and, in general, we are not very prone to excess in the article of gross eating; hence it is, that we much seldomer see morbid degrees of obesity, than they they do in England. Another circumstance may also contribute to render the disease in question more frequent there, than here; and that is, the disproportionate number of sedentary people: in England, and more especially London, there are at least fifty persons occupied in different branches of the finer mechanic arts, and as clerks confined to a writing desk, for one that is so employed in Ireland;

land; and the poſture in which theſe people are conſtrained to ſit, muſt neceſſarily tend to favour the accumulation of fat in the thorax, and to impede the circulation there: whence not only the heart and its appendages may be diſpoſed to run into a morbid ſtate, but the blood alſo acquire different degrees of an acrimonious diſpoſition.

A METHO-

A

METHODICAL INTRODUCTION

TO THE

PRACTICE

OF THE

ART OF MEDICINE.

BOOK VIII.

MENTAL DISEASES.

CHAP. I.

Of the Mania, and Melancholia.

THOUGH we may consider the *mania* and *melancholia* as distinct genera, yet it is to be observed, that they are apt to slide into each other, and undergo various degrees of combination.

For the *melancholia* that is accompanied with sadness and fear, frequently changes to the *mania*, which is attended with audacious rage; and when the furious madness abates, the despondency, and dejection of mind, will often return heavier than before.

It is a very ſurpriſing circumſtance, that mad people are not only leſs liable to be ſeized with infectious diſorders than thoſe who are in perfect health, but even when labouring under other diſeaſes, if the patients chance to be ſeized with madneſs, they are ſometimes freed from their former complaints.

Dr. Mead relates two very remarkable inſtances; one of a young lady of twenty years of age, of a lively cheerful temper, but weakly conſtitution, who, from a bad habit of body, fell into a dropſy. After trying various methods of cure to no purpoſe, when ſhe was paſt all hopes of recovery, ſhe was, on a ſudden, ſeized with madneſs, from no cauſe that could be aſſigned, attended with great anxiety, and vain terrors of mind; for ſhe imagined that ſhe was to be apprehended, tried, and executed for high-treaſon. In the mean while ſhe gathered ſtrength, and the ſwelling of her belly ſubſided viſibly, ſo that in a ſhort time, ſhe was judged by her phyſicians capable of bearing more powerful medicines, ſuited to her two diſeaſes. Accordingly, ſhe was put into a courſe; firſt, of evacuants, and then of ſtrengthening ſtomachics, which had ſo good an effect, that in ſome months ſhe recovered perfect health of mind and body.

The other, was alſo the caſe of a beautiful young lady, who, in the twenty-eighth year of her age, was ſeized with a violent cough and ſpitting of blood, for which ſhe was blooded plentifully in the arm every other day, for five or ſix

times.

times. This diminiſhed the violence of the ſymptoms, but did not entirely remove them; and in two months a hectic fever came on, attended with heat, thirſt, and night-ſweats, together with great waſting of fleſh, and frequent ſpitting of tough ſlime from the lungs and throat, interſperſed here and there with ſmall portions of yellow purulent matter. In a little time it was evident that ſhe was running faſt into a true pulmonary phthiſis, and death ſeemed to be at the door; whereupon the patient became anxious for the ſalvation of her ſoul, and began to be overpowered by religious terrors. Night and day ſhe thought herſelf ſurrounded by devils; ſulphureous flames, and other horrid images of the everlaſting tortures of the damned, were always preſent to her diſordered imagination. But from this time the ſymptoms of the original diſeaſe began to abate; the febrile heat decreaſed; the ſpitting ſtopt; the ſweats grew leſs; and her whole habit was ſo much changed for the better, that the bodily ſtrength ſeemed to become more adequate to the performing the functions of life, in proportion as the mind became leſs capable of governing the body.

The diſeaſe was now treated by evacuations proportioned to her ſtrength, and other proper medicines, which ſeemingly had ſo good an effect, that there appeared ſome hopes of a perfect cure. But toward the end of the third month, the hectic fever returning carried off the patient, after all theſe flattering expectations.

On the other hand, it has been known, that an intermittent fever, ſupervening madneſs of long ſtanding, has proved a cure for the madneſs; the ſenſes having returned, when the fever terminated; Dr. Monro, * ſaw two inſtances of this, himſelf; and mentions it as an obſervation of his predeceſſor, in the care of Bethlem hoſpital.

Another remarkable circumſtance is, that immoderate joy, long continued, as effectually diſorders the mind as anxiety and grief. For it was obſervable in the famous South-Sea year, when ſo many immenſe fortunes were ſuddenly gained, and as ſuddenly loſt, that more people had their heads turned, from the prodigious flow of unexpected riches, than from the entire loſs of their whole ſubſtance.

Mad people, eſpecially of the melancholic kind, ſometimes obſtinately perſevere in doing things which muſt excite great pain; whence it ſhould ſeem as if their minds were troubled with ſome diſtracting notions, which make them patiently bear the preſent diſtreſs, leſt more ſevere tortures ſhould be inflicted; or poſſibly they may think that, by thus tormenting the body, they render themſelves more acceptable to the divine Being, and expiate the heinous ſins of which they may imagine themſelves to have been guilty.

All the ſpecies and degrees of madneſs which are hereditary, or that grow up with people from their early

* Dr. John Monro, phyſician to Bethlem hoſpital; in his remarks on Dr. Battie's treatiſe on madneſs: from which, and from Dr. Mead's monita, the preſent book is chiefly compiled.

early youth, are out of the power of phyſic; and ſo, for the moſt part, are all maniacal caſes of more than one year's ſtanding, let them ariſe from what ſource ſoever. Very often, mere waſte, or the dregs of ſome particular diſeaſe, ſuch as an ague, the ſmall-pox, or a nervous fever, ſhall occaſion different degrees of fooliſhneſs, or madneſs. In theſe caſes, the cure muſt not be attempted by evacuations, but, on the contrary, by nouriſhing diet, clear air, moderate exerciſe, and the uſe of wine: whereas, in almoſt all the other maniacal caſes which ariſe from different ſources, and which come on in conſequence of intemperate living, violent paſſions, or intenſe thinking, it is generally held, that evacuations of every kind are neceſſary, unleſs the conſtitution of the patient be ſuch as abſolutely forbids them.

Blood is moſt conveniently drawn either from the arm or jugulars; and if the weakneſs be ſuch, as renders it improper to take away much blood, we may apply cupping-glaſſes to the occiput.

Vomiting in weakly people muſt be excited by the vinum ipecacoanæ, but in the more robuſt, by emetic tartar, or antimonial wine: the moſt efficacious cathartics are the infuſion or tincture of black hellebore, or infuſion of ſena, quickened with tincture of jalap; but if there be ſuppreſſion of the menſes, or hæmorrhoidal diſcharge, then aloetic purges will be more proper. In general, mad people require very large doſes, both of the emetics, and cathartics, before any conſiderable operation enſues.

Dr.

Dr. Monro aſſures us, that the evacuation by vomiting, is infinitely preferable to any other: the prodigious quantity of phlegm, with which the patients in this diſeaſe abound, he ſays, is not to be got the better of, but by repeated vomits; and, he obſerves, that the purges have not their right effect, or do not operate to ſo good purpoſe, until the phlegm is broken and attenuated by frequent emetics. He mentions the caſe of a gentleman who had laboured under a melancholy for three years, from which he was relieved entirely by the uſe of vomits, and a proper regimen: increaſing the diſcharge by urine, is alſo of the greateſt moment, eſpecially when any degree of fever is preſent: the cutaneous diſcharges are alſo to be promoted, for which purpoſe the hot bath is of the higheſt ſervice in maniacal caſes. Hoffman aſſerts, that he has ſeen numerous inſtances, both of inveterate melancholy, and raging madneſs, happily cured by means of warm bathing; bleeding and nitroſe medicines having been premiſed. Camphor has alſo been highly commended; but if we believe Dr. Locker of Vienna, not very deſervedly: having found very good effects from a ſolution of this medicine in vinegar, he took it for granted, that all the ſucceſs was owing to the camphor; therefore, in order to give it a fair trial, he ſelected ſeven patients, and gave it in large doſes, of half a drachm twice a-day. This was continued for two months, and the doctor was ſurpriſed to find that only one of his patients received any benefit. He then returned the other ſix back to the camphorated julep, made with vinegar, and in a few weeks four

of

of them recovered the uſe of their reaſon. This inclined him to think that the virtue depended ſolely on the vinegar, and, accordingly, he began to make the trial. Common vinegar was firſt given, but after a little while he fixed on that which had been diſtilled, and gave about an ounce and half of it every day; the patients having been previouſly prepared, by bleeding and purging, which was repeated, according as it was found neceſſary. He gives a liſt of eight patients who were cured by this method; ſome in ſix weeks, others in two months, and none of them took up more than three months in perfecting the cure. He does not indeed give the ages of the patients, nor mention the circumſtances of the caſe, only ſays, they began the vinegar ſuch a day, and were diſcharged cured on ſuch another day; and, he adds, that they all continued well at the time of his writing.

Dr. Locker informs us, that this medicine acts chiefly as a ſudorific; and he obſerved, that the more the patients ſweated, the ſooner they were cured; it was alſo found to promote the menſtrual diſcharge in ſuch as had been obſtructed, or had too little of this ſalutary evacuation. A remedy ſo ſimple and ſo ſafe, muſt be highly valuable, and it is recommended to ſuch practitioners as may have proper opportunities, to make trial of its effects.

Both reaſon and experience ſhew the neceſſity of confining ſuch as are deprived of their ſenſes, and no ſmall ſhare of the management conſiſts in hindering them to hurt themſelves, or do miſchief

to

to other perſons. It has ſometimes been uſual to chain, and to beat them, but this is both cruel and abſurd; ſince the contrivance called the Strait waiſtcoat, anſwers every purpoſe of reſtraining the patients, without hurting them.

Theſe waiſtcoats are made of ticken, or ſome ſuch ſtrong ſtuff; are open at the back, and laced on like a pair of ſtays; the ſleeves are made tight, and long enough to cover the ends of the fingers, where they are drawn cloſe with a ſtring, like a purſe, by which contrivance the patient has no power of his fingers; and, when laid on his back in bed, and the arms brought acroſs the cheſt, and faſtened in that poſition, by tying the ſleeve-ſtrings round the waiſt, he has no uſe of his hands. A broad ſtrap of girth-web is then carried acroſs the breaſt, and faſtened to the bedſtead, by which means the patient is confined on his back; and if he ſhould be ſo outrageous as to require further reſtraint, the legs are ſecured by ligatures to the foot of the bed.

It is of great uſe in practice to bear in mind, that all mad people are cowardly, and can be awed even by the menacing look of a very expreſſive countenance; and when thoſe who have charge of them once impreſs them with the notion of fear, they eaſily ſubmit to any thing that is required. The phyſician however ſhould never deceive them in any thing, but more eſpecially with regard to their diſtemper; for as they are generally conſcious of it themſelves, they acquire a kind of reverence for thoſe who know it; and by letting them

them ſee, that he is thoroughly acquainted with their complaint, he may very often gain ſuch an aſcendant over them, that they will readily follow his directions.

It is a more difficult matter to manage thoſe whoſe madneſs is accompanied either with exceſſive joy, or with great dejection and deſpondency, than thoſe who are agitated with rage; and all that can be done is, to endeavour to excite contrary ideas, by repreſſing the immoderate fits of laughter in the one kind, by chiding or threatening, (taking care however, not abſolutely to terrify them, which can never be done without danger, and has often added to the miſery of the unhappy ſufferer) and diſpel the gloomy thoughts in the other, by introducing pleaſing concerts of muſic, or any other ſpecies of entertainment, which the patients have been known to delight in, while they had the uſe of their reaſon.

Though bliſtering the head has generally been directed, Dr. Mead ſays, he has oftener found it to do harm than ſervice; but he recommends iſſues in the back, and adviſes to keep the head always cloſe ſhaved, and to waſh it from time to time with warm vinegar. Opium is uſually forbidden in maniacal caſes, as ſuppoſing that it always increaſes the diſturbance: but there are inſtances where large doſes of this medicine have been found to prove a cure; and perhaps if it were tried oftener, we ſhould find powerful effects from it: there certainly cannot much harm enſue from a few doſes, which may be immediately

ately diſuſed, if they ſhould be found to exaſperate the diſeaſe.

The diet of maniacal patients ought to be perfectly light and thin; their meals ſhould be moderate, but they ſhould never be ſuffered to live too low, eſpecially while they are under a courſe of phyſic; they ſhould be obliged to obſerve great regularity in their hours; even their amuſements ſhould be ſuch as are beſt ſuited to their diſpoſition; and after the diſeaſe appears to be ſubdued, chalybeate waters and the cold bath will be highly proper, to ſtrengthen their whole frame, and ſecure them againſt a relapſe.

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METHODICAL INTRODUCTION

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BOOK IX.

HUMORAL DISEASES.

CHAP. I.

Of Corpulency, conſidered as a Diſeaſe.

HAVING gone through all the different genera of univerſal diſeaſes, wherein the cure depends, chiefly, on regulating the motions, of the vaſcular and nervous ſyſtems; we have now only to conſider thoſe that require a more immediate attention to the ſtate of the groſs fluids; which are liable to accumulate, and ſtagnate in different parts of the body, or to be depraved by various ſpecies of acrimony that deſtroy their healthy craſis.

The firſt of theſe humoral diſeaſes is *corpulency*, termed by the writers *Polyſarcia*.

It

It was formerly mentioned, that in the natural and healthy ſtate, the fat, or animal oil, is not allowed to diffuſe itſelf throughout the cellular interſtices at large, but is confined to the places where ſuch an oily fluid is neceſſary, by a particular apparatus of diſtinct veſicles. But in many conſtitutions the oily part of the blood appears to exceed the requiſite proportion, and eaſily ſeparates from the other conſtituent parts, and then it is apt to accumulate in ſuch quantities, that we may ſuppoſe it to burſt thoſe veſicles which were originally deſtined to hinder it from ſpreading too far.

The increaſe of the omentum particularly, and the accumulation of fat about the kidneys and meſentery, ſwell the abdomen, and obſtruct the motions of the diaphragm; whence one reaſon of the difficulty of breathing which is peculiar to corpulent people; while the heart, and the large veſſels connected therewith, are, in like manner, ſo incumbered, that neither the ſyſtaltic nor ſubſultory motion can be performed with ſufficient freedom, whence weakneſs and ſlowneſs of the pulſe; but when the whole habit is in a manner overwhelmed with an oily fluid, the enlargement of the cellular interſtices will neceſſarily interrupt the general diſtribution, and circulation, throughout the nervous, and vaſcular ſyſtems; impeding the action of the muſcular fibres, and producing inſenſibility, ſomnolency, and death.

Theſe caſes are the more deplorable as there is but little proſpect of a cure; for the animal oil is of

of too groſs a nature to be eaſily taken up by abſorption; and we know, that when fluids are accumulated in the cellular ſyſtem, there are only two ways in which they can be carried off, or eſcape; namely, by the abſorbents, which take their riſe from the cellular interſtices, and through the pores of the ſkin by tranſudation.

Another misfortune is, that the diſeaſe ſteals on ſo imperceptibly, that it becomes inveterate by the time that people begin to think of purſuing the proper means of relief.

Soap has been propoſed as a remedy, to melt down, and facilitate the abſorption of the fat in corpulent people; and Dr. Fleming, ſome years ago, publiſhed a little treatiſe, wherein he recommends this medicine, and relates the caſe of a gentleman who is ſaid to have received conſiderable benefit from it. But perhaps the ſoap-lees would be more powerful, and might be more eaſily taken, ſheathed, as formerly directed, when recommended as a diſſolvent of the ſtone.

Lieutaud adviſes to take acetum ſcilliticum in ſmall doſes, with frequent purging and briſk exerciſe. But it will ſeldom happen that the patients will be found ſufficiently ſteady, to perſiſt in any of theſe courſes, it being the nature of the diſorder to render them irreſolute, and inattentive to their condition; therefore, the principal uſe of rules, muſt be with a view to prevention; and perſons who are diſpoſed to corpulency ſhould take care, in time, to prevent it from becoming an abſolute diſeaſe; by uſing a great deal of exerciſe, not indulging

dulging in ſleep, and abridging their meals, eſpecially that of ſupper. Salted meats are leſs fattening than ſuch as are freſh; and drinking freely of coffee is recommended to corpulent people.

But Dr. Fothergill obſerves that a ſtrict adherence to vegetable diet, reduces exuberant fat, more certainly than any other means that he knows of; and gives two caſes, wherein this regimen ſucceeded remarkably well. * The famous Dr. Cheyne, brought himſelf down, in this way, from a moſt unwieldy bulk, to a reaſonable degree of weight; as he himſelf informs us.

CHAP. II.

Of the different Species of Dropſy, and Methods of Treatment.

ALL that part of the cellular ſyſtem which is not occupied by oil, and all the larger cavities containing the different viſcera, are conſtantly bedewed with a ſubtile lymph, that ouzes from innumerable pores in the coats of the arteries, but which is abſorbed by the valvular lymphatics, as faſt as it diſtils, and by them, returned back into the general maſs: ſuch is the natural and healthy ſtate; but if at any time this lymph ſhould chance to be poured into the cells, or cavities, in greater quantities than the abſorbents can readily take up, or

* See Medical Obſervations, vol. 5th, page 248.

or if these vessels should be lacerated, obstructed, or lose their power of absorbing, then a dropsy will take place.

If it be in the cellular system at large that the lymph is suffered to accumulate, the whole body swells, and the disease is termed *Anasarca.* If it be in the head that the watery fluid is collected, the name of this species of dropsy is *Hydrocephalus*; if in the chest, *Hydrops Pectoris* or *Hydrothorax*; and if in the abdomen, *Ascites.*

Formerly, the theory of dropsies was confused and unsatisfactory; but now, since the true nature and use of the valvular lymphatics have been explained by different physiologists of great eminence,* we may not only comprehend the immediate causes of the disease, but also see clearly whence we are to expect relief.

Every thing that can weaken the absorbent power of the lymphatics; prevent the return; or occasion a preternatural secretion and ouzing of lymph; may be considered as a remote or possible cause of dropsy.

We

* Particularly Dr. Hunter, to whom the medical world is so much indebted, for his many ingenious discoveries; Dr. Alexander Monro, the present very celebrated Professor of Anatomy, at Edinburgh, who first made the public acquainted with the lymphatic system; and the late Mr. Hewson, by whose untimely death, physiology sustained an irreparable loss. See Hunter's Medical Commentaries; Monro, De Venis Lymphaticis valvulosis; and Hewson's Description of the Lymphatic System.

We are to obſerve however, that the fluid collected in caſes of dropſy, is ſeldom found to be a pure lymph, ſuch as bedews the ſeveral cavities in the healthy ſtate; for this always coagulates, when heated to a certain degree, or when mixed with acids or ardent ſpirits; whereas the water of hydropic ſwellings, is not often obſerved to coagulate; being generally the produce of a morbid ſtate of the blood, as well as of a depraved ſecretion.

Profuſe diſcharges of all kinds weaken the power of the heart and arterial ſyſtem, whence the blood is not ſufficiently elaborated, nor its minute particles properly blended, ſo that the watery part is apt to ſecede, and ouze through the pores in the ſides of the arteries into the cellular interſtices, and different cavities; and here it will neceſſarily accumulate, if the abſorbents do not carry it off with proportionable ſpeed. But the ſame cauſes which weaken the heart will alſo weaken abſorbent veſſels, and hence it is that a dropſy ſo commonly ſucceeds extraordinary loſſes of blood.

Intemperance of every ſort is apt to lay the foundation of a dropſy; as ſuch exceſſes deſtroy the appetite, and impair the digeſtive organs, whence want of nouriſhment, and conſequently a weakneſs of the veſſels, and deficiency in the proceſs of ſanguification. A diet conſiſting of ſubſtances not capable of yielding much nouriſhment, and at the ſame time drinking immoderately, tend to produce dropſies on a double account; by not only weakening the power of the veſſels, but alſo as throwing into

into the blood a disproportionate quantity of watery fluid.

Dropsies have sometimes been known to ensue immediately upon the striking in of a cutaneous eruption; probably, from the acrid humour falling upon the lymphatic glands, and affecting them in such manner as to obstruct the return of the lymph; for it was observed, on a former occasion, (page 165,) that the soundness of these glandular bodies, is in some measure necessary, for allowing the lymph to return with freedom, from the circumference of the body toward the center.

Let us now proceed to consider the different species of dropsy.

Anasarca.

The signs of an *anasarca* are so very obvious, that it is impossible to mistake the disease. The legs first begin to shew the accumulation and stagnation of the watery fluid, and the swelling in them is always most conspicuous toward evening. By degrees the tumefaction extends upwards, and occupies the trunk of the body, the arms and the head; then the breathing becomes difficult, the appetite fails, the urine diminishes, the belly is bound up, and a perpetual thirst distresses the patient, who loses strength daily, and will soon inevitably sink under the weight of the disease, if not relieved by medicine, or unless a spontaneous diarrhœa, or profuse discharge of urine should chance to supervene; for these are the only discharges we can

hope for, ſince dropſical people never ſweat ſpontaneouſly.

The cure of an *anaſarca* is to be attempted firſt by briſk purgatives, provided there has not been any profuſe diſcharge, or previous illneſs, to exhauſt the patient.

One of the beſt cathartics in theſe caſes is the radix jalapii, adminiſtered in different forms; * or, in the more robuſt habits, a mixture of equal parts of gamboge and cream of tartar, from twelve to twenty grains.

On the intermediate days, it will be proper to give a ſpoonful of muſtard-ſeed, and order it to be waſhed down with a decoction of the green tops of the common geniſta or broom; or the patient may drink twice or thrice in the day a glaſs or two of Rheniſh wine in which ſome fixed alcaline ſalt has been diſſolved, (half an ounce to a quart) and every night take a quieting and diuretic draught of cinnamon water, acetum ſcilliticum, and the paregoric elixir.

If, after three or four repetitions of the cathartic, the diſeaſe does not evidently appear to give way, we are not to perſiſt in purging, leſt the patient be thereby further weakened, but depend chiefly on diuretics; and if theſe ſhould not be followed with ſucceſs, have recourſe to the ſweating

* When the ſtomach will bear it, the jalap may be given in powder, rubbed up with an equal portion of nitre; but in delicate ſubjects, a palatable ſaline mixture, with the requiſite quantity of tinctura jalapii, will anſwer better.

ing chair, which is particularly adapted to this ſpecies of dropſy, becauſe a great part of the ſtagnant lymph may, in this way, be diſcharged through the pores of the ſkin.

Scarifying or puncturing the legs is a uſual practice in the *anaſarca*, and oftentimes gives vent to a great quantity of water; but the ſurgeon ought to be cautious in making the ſcarifications, leſt they ſhould either be too deep, or too long; and muſt take eſpecial care, by ſpirituous fomentations and proper digeſtives, to prevent a gangrene. Dr. Fothergill obſerves, that the ſafeſt and moſt efficacious way of making theſe drains is by the inſtrument uſed for cupping, called a *ſcarificator*; and he always orders it to be ſo applied, as to make the little wounds tranſverſely; as they not only diſcharge better, but are alſo longer in healing, than when made longitudinally.

If we are ſo ſucceſsful as to carry off the water by any of the methods above-mentioned, it will then be proper to put the patient on a courſe of the cortex combined with chalybeates and aromatics, with a view to ſtrengthen the ſolids; and enjoin the daily uſe of the fleſh bruſh, with ſufficient exerciſe.

The diet in dropſical caſes of all kinds is generally directed to conſiſt of plain meats, roaſted rather than boiled; the patient ſhould avoid crude, watery, and flatulent vegetables; and ought to drink Rheniſh wine and Seltzer water, when it can be afforded; and when it cannot, common water with a ſmall portion of geneva.

Hydrocephalus.

A dropſy of the head is a diſeaſe peculiar to infancy, and perhaps there is no inſtance of its having been cured. The writers, nevertheleſs, do not fail to recommend iſſues and ſetons to drain off the water; and purging at proper intervals, with jalap and calomel, for the ſame purpoſe.

The *internal dropſy of the brain*, ſo well deſcribed by Dr. Whytt, we have ventured to term the *Hydrocephalic Fever*. And,

The *hydrops pectoris* has been already treated of, ſo that only the *aſcites* now remains.

Aſcites.

It ſometimes happens, that, along with an anaſarca, there ſhall be a collection of water in the cavity of the abdomen; and ſuch caſes are ſeldom cured. Even the ſimple *aſcites* is very difficult to remove, unleſs the diſeaſe be recent, and the abdominal viſcera in a tolerably ſound ſtate; for when theſe are decayed or infarcted, there is very little room to hope for a favourable iſſue: and what adds to the difficulty in forming proper indications of cure, is the impoſſibility of knowing the true ſtate of theſe viſcera, or what may have been the original ſources of the dropſy.

An *aſcites* may be diſtinguiſhed from a *phyſconia* by the fluctuation or undulatory motion of the fluid, when we ſtrike the belly on one ſide, and lay the palm of the hand on the oppoſite; though in ſome caſes this fluctuation is not very perceivable; owing

owing either to the extreme viſcidity of the contained fluid, or to its being contained in a number of cyſts, or mixed with what are termed *Hydatids*.

Theſe *hydatids* have been commonly believed to be the coats of torn lymphatic veſſels; but there is no neceſſity for recurring to this opinion, as their formation ſeems eaſily accounted for, from the fortuitous concourſe and accretion of the groſſer parts of the ſtagnant lymph, which run together in the ſame way and make a ſimilar appearance, that the groſs parts of vinegar and other liquors do, when they turn ropey, and the ſediments form a number of tranſparent films. Hydatids which float looſe among the water in hydropic ſubjects, are ſimilar to theſe ropey films, and certainly were never organized; but as to the watery veſicles which are often obſerved to grow on the ſurface of the liver, they probably are varicoſe or over-diſtended lymphatics.

The *aſcites* will be diſtinguiſhed from a *tympany*, by the weight of the ſwelling as well as by the fluctuation; but it will be no eaſy matter to tell when the water is in the cavity of the abdomen at large, or whether it may not be incloſed between the laminæ of the peritonæum, or perhaps lodged without-ſide this membrane, in a cavity formed by the tendinous expanſion of the tranſverſe muſcles.

The common aſcites, or that wherein the water fills the cavity of the abdomen, is preceded by a deficiency in the urinary diſcharge, and what is made,

made, is foul, with a yellowiſh or lateritious ſediment; the legs generally ſwell before there is any perceivable enlargement of the belly, and when this appears, the ſwelling of it is general. The face is often puffed up in a morning, and eſpecially the eye-lids, and frequently one of the hands will be found ſwelled. The patient now begins to grow thirſty, and breathes with difficulty when the head is laid down; the fleſh waſtes, the ſtrength fails, and the pulſe becomes weak and frequent. If blood be taken from one in theſe circumſtances, the ſerum will be found in a much larger proportion than it ought to be.

When dropſical ſubjects are opened, the liver is the bowel which is moſt commonly found in a diſeaſed ſtate; next to that the ſpleen, pancreas, and meſenteric glands.

With reſpect to the cure of an aſcites, we are in the firſt place to conſider what evacuations the patient is able to bear. If there be great weakneſs, violent purging will be very prejudicial; and therefore, if we do not ſoon obſerve the ſwelling to abate, and the patient begin to breathe with more freedom, we muſt deſiſt from the uſe of cathartics, and endeavour to carry off the water by diuretics. But unfortunately theſe are ſo uncertain in their operation, that what will ſucceed to a miracle in one caſe, ſhall produce no ſenſible effect in another; and hence the neceſſity of varying the medicines, in hopes of meeting with ſome one that ſhall promote the wiſhed-for diſcharge.

Among the ſafeſt and moſt powerful diuretics, we may enumerate the following: ſquills infuſed in wine,

wine, with horſe-radiſh root and muſtard, and a little aromatic ſpecies to give ſome degree of grateful flavour; Rheniſh wine, with ſalt of tartar; infuſion of juniper-berries, with ſweet ſpirit of nitre; decoction of green broom tops, half a pint morning and evening, with a ſpoonful of whole muſtard-ſeed. This ſimple medicine, as Dr. Mead relates, proved a cure in an old dropſical caſe, by not only keeping the belly open, but alſo carrying off five or ſix pints of urine every day. Different kinds of ardent ſpirits have at times proved powerful diuretics, and ſo have the common malt liquors, to perſons not uſed to them; but the effects of all theſe are accidental. It is of ſome importance therefore, in dropſical caſes, to indulge the longings of the patients for particular kinds of drink, provided it ſhall be found upon trial, that the liquor ſo longed-for paſſes freely by urine; as there are inſtances of a cure being perfected by the uſe of ſome drink which chanced to be perfectly new to the patient.

Such are the diuretics generally uſed by regular and cautious practitioners: but empirics, and thoſe who are not ſo fearful, venture on cantharides; the root of colchicum autumnale infuſed in vinegar, and boiled up with honey into an oxymel; tincture of copper; or cryſtals of ſilver: but none of theſe things ought to be directed in the ordinary courſe of practice, ſo as to truſt the preſcription to be made up by the common hands in apothecaries' ſhops; for whenever ſuch unuſual remedies are given, they ought to be prepared and

and adminiſtered by the perſon who chuſes to try them.

Narcotics, in caſes where there is great pain, muſt be given occaſionally; and theſe will ſometimes prove diuretic and thus anſwer two important purpoſes.

When neither cathartics nor diuretics are found to do ſervice, there is another method of cure, which ſome patients have had reſolution enough to put in practice; and that is, to abſtain entirely from drinking: but ſuch perſons muſt aſſuage their thirſt by moiſtening the mouth with a mixture of lemon juice and ſweet oil, or by eating biſcuit, now and then, which has been ſoaked in Rheniſh wine. Holding a leaden bullet in the mouth invites a flow of ſaliva, and keeps off thirſt, as is often experienced by people at ſea when they happen to run ſhort of water.

But when none of the methods which have been mentioned appear to leſſen the quantity of water, we ought to try the effects of the paracenteſis, or tapping.

Such readers as are not already acquainted with the method of performing this operation, which is neither complex, painful, nor dangerous, as it is now done, will find it deſcribed in Sharp, and in Heiſter, and in the firſt volume of the Edinburgh Medical Eſſays, wherein the late celebrated profeſſor Monro gives the deſcription of a broad belt which he contrived, to keep up the preſſure on the belly as the water runs off; for, unleſs ſufficient compreſſion is made, either by bandage, or the hands

hands of the aſſiſtants, the blood will ruſh in ſuch abundance into the weakened veſſels, that the heart will be in danger of not having a quantity ſent to it, ſufficient to ſtimulate the ventricles, whence a fatal ſyncope may enſue.

Since the paracenteſis is ſo eaſy, and may be ſo ſafely done, it ought to be oftener performed than it is, and may be adviſed in all caſes where the diſeaſe does not evidently and ſpeedily give way, either to cathartics or diuretics. For if the operation be deferred till the viſcera are ſpoiled, by long ſoaking in water, it can hardly be expected that any permanent relief will be procured. *

When the undulatory motion is very ſtrong, we may expect to let off the water entirely by tapping; but when the fluctuation is not ſo perceivable, we may reaſonably ſuſpect that the fluid is of a viſcid nature, contained in cyſts, or full of hydatids; or, which is ſtill worſe, that it is purulent or bloody. In all theſe caſes, very little can be expected from the operation, or indeed from any other ſcheme of relief; for it is only when the lymph happens to be tolerably pure, and can be drawn off entirely, that we have good ground to hope for ſucceſs.

There are ſeveral inſtances of perſons who have been tapped a great number of times, and thereby have

* The author is happy in finding his ſentiments with reſpect to this matter, confirmed by an authority of ſuch weight as Dr. Fothergill's. See his paper on the uſe of tapping early in dropſies, 4th vol. Med. Obſervations.

have had their lives prolonged; of which the moſt remarkable is that of Lady Page, mentioned by Dr. Mead, who, "in ſeventy-ſeven months, was "tapped ſeventy-ſix times, and had taken away "two hundred and forty gallons of water, with-"out ever repining at her caſe, or ever fearing "the operation."

The water having been drawn off, we are to put the patient on a courſe of ſtrengtheners; ſuch as the cortex, and filings of iron, with ſome of the warm aromatics, and a due proportion of rhubarb infuſed in wine. Enjoin briſk exerciſe and frictions on the belly, with ſuch a courſe of diet as ſhall be light and nouriſhing.

There are now and then hydropic caſes met with, wherein it appears that the power of the abſorbent veins has all at once been ſo increaſed, as to take up the ſtagnant water in the courſe of a few hours, which has afterwards flowed off in a profuſe diſcharge of urine; but this matter is all accidental, and phyſic is not in poſſeſſion of any remedies that we can aſſure ourſelves will produce ſuch powerful effects.

Sauvages has made a great many diſtinctions; not leſs than twenty-nine of the aſcites; but he himſelf confeſſes that they are not of much practical uſe. We ſhall therefore not copy any of them, but refer the curious reader to the Noſologia Methodica, as alſo to Van Swieten's Commentary, Mead's Monita, and Monro's Treatiſe on the Dropſy.

CHAP.

CHAP. III.

Of the Jaundice; different Species, and Methods of Treatment.

THE *jaundice* is ſometimes connected with the aſcites, and plainly manifeſts itſelf by the yellow colour diffuſed over the ſkin, but more eſpecially conſpicuous in the whites of the eyes, and the nails; the urine is foul and of a dark colour with a yellowiſh ſediment, capable of tinging white linen; the ſtools whitiſh or grey: the patient is dull, oppreſſed, generally coſtive, and has little or no appetite.

When the diſeaſe becomes inveterate, a moſt troubleſome itching is often felt all over the ſkin: the colour of it grows more dark, inclines to a green, and in ſome places appears blackiſh or livid: and now the diſorder gets the name of *Melaſicterus*, or *Black Jaundice*; whereas, at firſt, the term is *Icterus*, or *Aurigo* from the yellow colour; or *Morbus Regius*, becauſe it is recommended to give the patients every kind of indulgence, in order to recreate and keep up their dejected ſpirits.

Every thing that can interrupt the flow of bile into the duodenum may produce a jaundice. Hence preſſure on the *ductus communis* from tumours, whether they be ſeated in the liver, or in any of the adjoining viſcera; ſpaſmodic conſtriction of this canal; inflation of the duodenum, from wind

wind pent up in the cavity of that inteſtine, ſo as to cloſe the opening of the duct; and viſcid or ſolid ſubſtances, choaking up the ſame, are all of them to be held as poſſible cauſes of the jaundice.

Thus we may eaſily underſtand, that in ſome caſes the diſeaſe will come on by degrees, and remain incurable; while in others it ſhall make its appearance ſuddenly, and perhaps go off in a little time, without doing any ſenſible injury to the conſtitution.

It is to be obſerved, that a true jaundice, diſtinguiſhed by the yellow colour, only happens in conſequence of a reſorption of the *cyſtic* bile, which is confirmed by the appearances in diſſecting icteric ſubjects: for, when the excretion, or even ſecretion of the *hepatic* bile *ſolely*, is interrupted, the change of colour which this induces, is not abſolutely yellow, as in the true jaundice; but of that kind which is uſually termed ſallow, or pale, with a light tincture of yellow, or tendency to green.

The patients firſt complain of a tightneſs about the præcordia, with the ſenſation of an oppreſſive weight; and for ſome hours after eating, they are diſtreſſed by a ſharp heart-burning.

The next obſervable appearance is, a ſlight yellowneſs in the greater canthi of the eyes; the urine becomes ſomewhat higher coloured, and bilious excrements paſs by ſtool: afterwards a ſudden and unaccountable anxiety ariſes, without any apparent cauſe, with an intolerable pain about the right

right orifice of the ſtomach, and ſometimes throughout the whole lower belly.

This ſevere pain, which is uſually conſidered as a fit of the colic, ſoon raiſes ſome degree of fever, and is attended with violent vomiting; and after theſe ſymptoms have continued ſome hours, they generally go off with a looſeneſs, leaving the ſkin of a yellow colour; in ſome, the face and breaſt only have been tinged at the firſt attack, but in thoſe caſes the urine is of a very deep yellow.

After twenty-four hours, the patients generally find themſelves free from pain, anxiety, or ſickneſs, and being ſo eaſy, are apt to flatter themſelves that they are ſoon to grow perfectly well; and ſo they will, if the cauſe that produced the ſtoppage was of a yielding nature; ſuch as a ſpaſmodic ſtricture of the duodenum, and ductus communis, or an overdiſtenſion of the inteſtines by flatus. In theſe caſes, the urine will become daily leſs coloured with bile, the yellowneſs will go off, and no appearances of the diſtemper remain.

But if ſtoney concretions were the cauſe, in a few weeks, or perhaps not for ſome months, the whole train of complaints will return again in the ſame order; and, after the patient has been thus repeatedly attacked, the jaundice at length will become perpetual, worſe at ſome times than at others, though not attended with ſuch diſtreſſing ſymptoms as at the firſt attack. The yellow colour will now grow very deep, and diffuſe itſelf all over the body; the ſaliva will acquire a bitter taſte; and, in proceſs of time, when the craſis of the blood comes to be deſtroyed,

deſtroyed, it will eſcape from the veſſels, get into the cellular ſpaces, and give a general livid caſt; intolerable itching will prevent ſleep; the legs ſwell, and the abdomen at length filling with water, the miſerable patient will ſink under a dropſy.

The cure of a jaundice is to be attempted in different ways, according to the nature of the obſtacle that may have originally prevented the natural flow of bile into the duodenum; and hence the neceſſity of diſtinguiſhing different ſpecies of the diſeaſe; but the great difficulty is to determine theſe original ſources of the diſtemper, and much will depend on the ſagacity of the phyſician to find out when only flatus or ſpaſm are the cauſes; when tumours in the adjoining viſcera compreſs, or when ſtoney concretions choke up, the biliary canals.

(1.) The caſes of the firſt ſpecies, or *icterus ſpaſmodicus*, which is ſuppoſed to ariſe from mere ſpaſm, independent of any ſettled ſtoppage or obſtruction, may perhaps be diſtinguiſhed by the temperament of the patient, being of that kind wherein there is an exceſs of ſenſibility, proneneſs to hyſteric ſymptoms, or other ſpaſmodic complaints, while there is no ſwelling, tenſion, or ſoreneſs in the hepatic region. The treatment during the painful period has been already laid down when we treated of the bilious colic; and as in theſe caſes the jaundice uſually wears off ſpontaneouſly, in the courſe of a few days or weeks, nothing particular is required: when the yellowneſs is more fixed, we ſhall then have recourſe to ſome of the remedies hereafter to be mentioned.

(2.) The

(2.) The *icterus à preſſura*, from an infarction or tumour of the liver, or ſome of the adjoining viſcera, will be known from its coming on gradually, and from the fulneſs, and, perhaps, hardneſs of the hypochondria; as alſo from the preceding ſtate of the patient's health, which may give reaſonable cauſe to ſuſpect obſtructions in the abdominal viſcera.

The cure, if at all attainable, muſt be by a long courſe of ſuch waters as are impregnated with the foſſile alcali, together with the aperient gums and ſoap; occaſionally purging either with aloes, rhubarb, ſalts, or oleum ricini, according as they may chance to ſuit the taſte or circumſtances of the patient. Bath water muſt never be ordered in theſe caſes, if there be any degree of hectic fever attending.

In ſome caſes it will be proper to join the flores martiales, or ſome other chalybeate preparation, to the gums and ſoap; in others mercurials, in different forms, will be requiſite; and, where there is an inflammatory tendency, it will be neceſſary to bleed, and give cooling ſedative medicines, in order to allay the feveriſh ſymptoms.

(3.) The *icterus calculoſus*, which is ſuppoſed to be the moſt frequent ſpecies of all, may be known by attending to the progreſs of the diſeaſe, as above deſcribed. While theſe ſtoney concretions remain in the gall-bladder, they never produce any appearance of jaundice; for it is not uncommon to find this receptacle full of ſuch ſolid ſubſtances

in

in ſubjects where the ſkin had not the leaſt tinge of yellow.

A perfect cure, in this ſpecies, is not often attained: the moſt likely means to accompliſh it, are courſes of ſuch waters as abound in the native alcali, like the Vahls; or have an abſtergent ſaponaceous quality, like thoſe of Bareges; aided by frequent exerciſe, eſpecially riding; regular living; and goat's whey in the proper ſeaſon.

The diet, in all caſes of jaundice, or bilious cacochymy, ſhould conſiſt of meats that are light, and of eaſy digeſtion, not crude or flatulent; the beſt drink for thoſe whoſe circumſtances can afford it, is Seltzer water mixed with hock, in caſes where there is any tendency to feveriſhneſs or inflammation; or with Madeira, Liſbon, or Sherry, where the conſtitution is rather cold and phlegmatic.

The frequent returns of colic to which icteric ſubjects are liable, require that particular attention be given to prevent coſtiveneſs; by taking from time to time oleum ricini, ſoap and rhubarb, or ſoap and aloes, according to the difference of the patient's habit.

CHAP.

CHAP. IV.

Of the Emphyſema, Tympany, Phyſconia, Atrophia, Oſteoſarcoſis, and Sarcoſtoſis.

Emphyſema.

WE have ſeen, that both the oily, and the watery part of the blood, is liable to ſecede from the other conſtituent parts; ſo is the aerial, though theſe caſes occur but ſeldom; the original *emphyſema* being an uncommon diſeaſe. When the pleura is wounded by the ſplinters of a fractured rib, or in any other way, ſo that the air, from the lungs, can inſinuate itſelf into the cellular interſtices, the whole body has been obſerved to ſwell to a monſtrous ſize; as particularly in a caſe related by Dr. Hunter, in the ſecond volume of the London Medical Obſervations; and in another, by Mr. Leake, in the third volume, to which we refer. Theſe caſes require that punctures ſhould be made in the ſkin, in order to let out the confined air; proper means to keep off inflammation or fever, and facilitate the healing of the wound, being purſued in the mean while.

As to the primary *emphyſema*, Dr. Huxham gives the hiſtory of one of conſiderable extent, wherein the patient recovered; but when the inflation becomes general, we may, for the moſt part, conſider it as an incurable caſe; there being no remedy yet known to reſtore the blood to its healthy

craſis, after it has once undergone ſuch high degrees of corruption, as muſt neceſſarily exiſt, before the aerial part, can be extricated.

Tympany.

A flatulent ſwelling of the abdomen, will ſucceed the putrefaction of water, or other fluids pent up in that cavity; or it may enſue from the corruption, or mortification of different viſcera; but all ſuch caſes muſt be mortal, and the only ſpecies of *tympany* capable of being relieved, is that, wherein the ſwelling ariſes from a general diſtenſion of the inteſtines, by flatus. Hiſtories of ſuch caſes are recorded in different books, particularly the Memoirs of the Royal Academy of Sciences at Paris, for the year 1713; the Philoſophical Tranſactions, No. 415; and firſt volume of Edinburgh Medical Eſſays, where there is an account of a tympany ſucceſsfully treated by Monro. Moderate purging, with ſtrengthening carminatives interpoſed; rubbing the belly, ſwathing it with a broad flannel-belt, and the exerciſe of riding, are the means to be uſed in theſe caſes.

Phyſconia.

Thoſe hard ſwellings of the abdomen, which are known in general by the appellation of *Phyſconia*, are moſt commonly met with in women, and uſually proceed from an enlargement of the ovaria. When ſuch happen in men, the liver and ſpleen are the bowels moſt commonly affected, though ſometimes the bulk of the omentum is monſtrouſly

monſtrouſly increaſed by ſteatomatous ſwellings; or the meſenteric glands, in ſcrofulous ſubjects, are preternaturally enlarged.

It muſt always be difficult to aſcertain the ſeat of the diſeaſe; and, as to the cure, we may deſpair of obtaining it, if the ſwelling does not ſoon give way, to ſuch courſes as were propoſed for that ſpecies of jaundice, which is occaſioned by an infarction of the different viſcera.

Atrophia.

There is alſo but very little room to hope for the cure of the *atrophia*, or that waſting of fleſh which is unaccompanied with a hectic fever. This caſe is commonly called a Nervous Conſumption. The firſt attempts muſt be to amend the ſtate of the digeſtive organs, and improve the appetite by ſtomachic ſtrengtheners, ſuch as have been mentioned on former occaſions, and then try the effects of aſſes-milk, beef-tea, and other kinds of light nouriſhment. Worms, eſpecially the tænia, may happen to be the cauſe of an atrophia; and for this reaſon, it will be proper ſometimes to try the more powerful anthelminthics; but we muſt be cautious of puſhing them too far, leſt we ſtill further confirm the diſeaſe.

Oſteoſarcoſis, and *Sarcoſtoſis.*

A ſtill leſs proſpect is there of giving any relief, in thoſe deplorable, but happily uncommon, caſes,

where the bones either loſe their ſolidity; or where the fleſhy ſubſtance of the muſcles degenerates into bone.

In Gooche's Caſes and Practical Remarks in Surgery, there is a hiſtory of an *oſteoſarcoſis* in a woman. On diſſection, it was found that the boney ſubſtance had the appearance of liver, indurated, and whatever original laminæ were left, were in the exterior part of the bone, which ſeemed to ſhew, that the diſeaſe muſt have begun in the marrow, or interior part.

M. Morand has alſo publiſhed a ſimilar hiſtory, likewiſe, in a female ſubject, who died at Paris in 1752. The diſeaſe came on gradually for two years, and was at firſt conſidered as a rheumatiſm; ſhe had moſt excruciating pains, and contractions of the muſcles, which diſtorted every limb, and reduced her to ſuch a miſerable figure, that he was obliged to add a print, in order to give an idea of the appearance which the body made at the time of her death. M. Morand imagined, that baths prepared with alum, ſulphur, and vitriol, if timely applied, might prove uſeful in ſuch caſes, and retard the progreſs of the diſeaſe.

A third caſe, of the ſame diſorder, was obſerved in 1759 at Waterford. A gentlewoman in her forty-ſeventh year began to complain of pains, which were ſuppoſed to be rheumatic, and treated as ſuch; they continued ſo ſevere for the firſt year as to confine her to her chamber, but in the beginning of the ſecond, ſhe totally loſt the power

power of her limbs. From that time ſhe lingered on for eight years, and during the two laſt of her life was obſerved to diminiſh gradually in ſtature, till ſhe was reduced to leſs than a third of her original height, and in the mean while the bones loſt their ſolidity. After death there was not any medical perſon in the place who had more curioſity in examining the body, than by ſimply thruſting a knife into the arms, legs, and thighs, whereby the byſtanders were ſatisfied that there was a complete diſſolution of the bones in thoſe parts: a little while before ſhe died, the bone of the lower jaw became ſoft, but the ſcull loſt nothing of its hardneſs, and preſerved its natural texture to the laſt. During her whole illneſs, ſhe ſtill remained free from oppreſſion or ſickneſs, had an excellent appetite, and retained her ſenſes to the laſt hour. Her urine was turbid, and depoſited a whitiſh earthy ſediment like chalk.

The *ſarcoſtoſis* has already been mentioned, under the name of *Catochus Scorbuticus*, in page 336.

CHAP. V.

Methods of treating the different Species of Mortification.

THE term *Sphacelus*, of which gangrene is but an inferior degree, is applied to thoſe mortifications wherein there is a diſcharge from the mortified part, accompanied with a puffy or œdematous ſwelling;

ing: while that of *necrosis* is appropriated to those cases where the mortified parts are dry, and have a withered appearance.

Every thing that has the power of destroying the texture of the living solids, or which can totally interrupt the circulation in any particular set of vessels, may bring on a mortification. Thus the mere force of a violent inflammation, driving the blood against the sides of vessels already weakened, (whether from internal acrimony or external injuries) will oftentimes burst these vessels, and so produce a mortification; as was fully explained when we were on the subject of inflammations: and this we often see come to pass after severe bruises and compound fractures, which injure and weaken a great number of vessels, so that their coats are not able to sustain the load of blood, which is afterwards thrown into them, by the force of the supervening inflammation.

Thus, in dropsical habits, the vessels, from long soaking in water, are weakened so far, that when an inflammation is once brought on, in consequence of scarifying or blistering, their coats are soon lacerated, as not being able to resist the force of the fluids: as also, in constitutions where the juices have acquired high degrees of sharpness, a mortification will readily happen, when the force of the blood happens to be directed against the vessels in any particular place; or, if a load of acrid humour should be thrown off critically from the mass of circulating fluids, and settle on any particular part of the body, that part will be apt to mortify.

The

The progreſſive motion of the blood may be interrupted by exceſſive cold, as often happens during ſevere froſt; by ligature on a particular limb; by compreſſion on a particular part, from lying too long in one poſture: or a perfect ſtagnation may enſue from a total want of the nervous influence, as in a complete palſy.

Theſe are the general ſources of a ſphacelus, or necroſis; which are eaſily diſtinguiſhed by the cadaverous fœtor, and total inſenſibility of the parts affected, and by the blackiſh colour, which is owing to the corrupted blood, now extravaſated, and diffuſed throughout the cellular interſtices.

It is ſufficiently evident, that the cure in theſe caſes muſt conſiſt in a ſeparation of the mortified ſolids, and all our endeavours are to be directed to the forwarding this ſeparation.

When the vis vitæ is ſtrong, and the general maſs of fluids tolerably ſound, there is little to be done in the way of internal medicine. The mortified ſloughs and teguments are to be cut through, the ſcarifications dreſſed with warm balſams, and the part wrapt up in flannels wrung out of an antiſeptic fomentation; all with a view to prevent further corruption and putrefaction of the extravaſated juices, as well as create an intenſeneſs of motion, in the veſſels which are left entire; ſo that the force of the fluids in them, may puſh off the mortified ſloughs. * But when the vis vitæ is low, and the

* In November 1773, Mr. Power, an ingenious Surgeon in Poleſworth, ſent a paper to the College of Phyſicians at London, with

the fluids ſharp, then, the cortex is the medicine on which we place our chief dependance, aſſiſted by wine

with the hiſtory of a caſe, which they have publiſhed in the third volume of the Medical Tranſactions.

But this collection, though called a volume, is in fact only a ſmall pamphlet of fifty-two pages, conſequently, as a fugitive piece, extremely liable to be loſt, or thrown aſide, and therefore the hiſtory is here inſerted at large, as it contains matter of ſome importance, and points out a method of treating mortifications that is altogether new.

" About the beginning of July 1770, I was called to the aſſiſtance of a gentlewoman of this town, aged 67 years; ſhe was of a thin relaxed habit of body, and her natural ſtrength much decayed: at this time a mortification was beginning in the end of her great toe, which did not ſucceed any other diſorder or accident.—The bark, red wine, opiates, volatile and cordial medicines, were therefore freely adminiſtered. Cataplaſms, with the bark, opiates, and aromatics, were frequently applied externally; vinous, and ſpirituous ſtupes were likewiſe uſed; but before the end of September all the toes on the affected foot were periſhed; and the mortification kept advancing ſlowly, with a livid appearance ſpreading as high as the ankle: which gave me very little hopes of her recovery, eſpecially as ſhe grew tired of all medicines.—But as I had ſucceſsfully preſerved dead fleſh for many months, by keeping it in fixable, or new generated air, I determined to try the effect it would have by an external application in this caſe, expecting the putrid effluvia of the gangrened parts (on which there is great reaſon to believe the ſpreading of all gangrenes depend) might be corrected, or in ſome part deſtroyed, by the fixable air. A cataplaſm was therefore directed of ſuch ingredients as I thought beſt adapted to ferment by the addition of ſome yeaſt, as wheat flower, honey, and water; theſe were mixed into a thin paſte; and ſet by the fire till they began to ferment, and were then applied, nearly cold, once a day for ten days, when to my great ſatisfaction the mortification was ſtopped, and the putrid ſtench abated; the cataplaſms were continued till the dead toes became looſe, and

were

wine and other cordials; externals being managed as juſt now directed, ſo as to haſten a ſeparation of the mortified parts.

Amputating

were removed, when common digeſtives and defenſative plaſters were ſubſtituted in their place; the ſore began to diſcharge good matter, put up new fleſh, and had a favourable appearance. But accidentally one night about the end of November ſhe got her dreſſings off, and lay with the ſtump expoſed to the cold air; in the morning I found the ſtump black and dry. I dreſſed it with warm ſoft digeſtives, and covered them with the *Theriaca Londinenſis*: but could not get any diſcharge from it, the mortification having again taken place; and reached in a few days the thick part, or middle of the foot. The ſmell becoming again intolerable, the fermenting cataplaſms were applied as before; and all the livid appearance, which ſpread a hand's breadth above the ankle, was alſo covered with them; and in a few days, I was thoroughly ſatisfied the mortification was again ſtopped; though her appetite was greatly decayed, and her ſtrength much exhauſted. The cataplaſms were continued till the beginning of March 1771, when the dead parts ſeparated about the middle of the metatarſal bones, almoſt as even as if they had been taken off with a ſaw, and were removed with the dreſſings without the loſs of a tea-ſpoonful of blood. From this time the ſore healed kindly, though remarkably ſlow; ſhe began to recover her appetite and health, which ſhe ſtill retains."

"Since the above caſe, I have ſeen the good effects of fixed air, applied nearly in the ſame manner, (adding ſometimes a little *cort. Peruv.* or *tinct. Thebaic.* to the cataplaſms) in a beginning mortification on the leg of an old gentleman, attended with ſwelling and blackneſs about his foot and ankle; with a livid appearance running up the ſide of his leg, and many large veſications upon the foot, which never grew any larger, nor more in number, after the fermenting cataplaſms were applied; but healed, or dried up, ſoon; the ſwelling abated, and the blackneſs diſappeared in a few days; and in a fortnight he was able to walk about, and ſtill continues well."

"I have

Amputating in theſe caſes will be altogether vain, until we find that the mortification has come to a ſtand, and the ſeparation is actually begun: therefore, in ſuch ſubjects as appear to have a general indiſpoſition of the fluids, and where the diſorder cannot be conſidered as local, we would adviſe delaying the operation; and in the mean while try, by the cortex and other ſtrengthening antiſeptics, to haſten the ſeparation.

A mortification from cold is not to be managed like that from any other cauſe; the only remedy is, to rub the parts affected with ſnow, and a little ſalt mixed; or, if theſe cannot be had immediately, to dip the parts in cold water, and rub them in it; and the attendants are not to think of applying any thing hot, or bring the patient near a fire, till freedom of circulation ſhall be perfectly reſtored.

There are ſome very aſtoniſhing inſtances of mortifications coming on very ſuddenly, without being preceded by any fever, inflammation, or conſiderable pain. And there are hiſtories of ſuch caſes in moſt of the general collections, particularly, the Memoirs of the Royal Academy of Sciences at Paris, for 1710; and in the Philoſophical Tranſactions, for 1763.

In aged people, mortifications of the extremities are ſometimes obſerved to enſue from trifling injuries,

"I have alſo uſed the fermentable cataplaſms, with ſome advantage to fœtid foul ulcers, where I have ſuſpected the abſorption of the fœtid matter to be prejudicial to health."

injuries, ſuch as a ſcratch, or ſlight wound, from paring a toe-nail, or cutting a corn, and the patient ſeldom recovers.

Of late, a ſurgeon of great eminence has informed the public, that, in theſe caſes, large doſes of opium, check the progreſs of the ſphacelus, and haſten the ſeparation of the mortified parts: hitherto practitioners have truſted chiefly to the cortex and vinous cordials.

CHAP. VI.

Of the Scurvy; Theory of the Diſeaſe, and moſt ſucceſsful Methods of Treatment.

THE term *Scurvy* hath been indiſcriminately applied, even by phyſicians, to almoſt all the different kinds of cutaneous foulneſs; owing to ſome writers of the laſt century, who comprehended ſuch a variety of ſymptoms under this denomination, that there are few chronic diſtempers which may not be ſo called, according to their ſcheme; but what we now mean to treat of is the *Putrid Scurvy*, ſo often fatal to ſeamen, and to people pent up in garriſons without ſufficient ſupplies of ſound animal food and freſh vegetables; or which is ſometimes known to be endemic in certain countries,* where

* Particularly thoſe that ſurround the Baltic, and more eſpecially the northern coaſts; where the inhabitants are obliged, for the greater part of the year, to live on ſalted fleſh or fiſh, with little or no vegetable food, excepting coarſe bread.

But

where the nature of the ſoil, the general ſtate of the atmoſphere, and the common courſe of diet, all combine in producing that ſingular ſpecies of corruption in the maſs of blood, which conſtitutes this diſeaſe; for the appearances on diſſecting ſcorbutic ſubjects, ſufficiently ſhew that the ſcurvy may, with great propriety, be termed a diſeaſe of the blood.

Dr. Lind, to whom the world is ſo much indebted for his elaborate treatiſe on the ſcurvy, has in a poſtſcript to the third edition of that valuable work, given the reſult of his obſervations drawn from the diſſection of a conſiderable number of victims to this fatal malady, from which it appears that the true ſcorbutic ſtate, in an advanced ſtage of the diſtemper, conſiſts in numerous effuſions of blood, into the cellular interſtices of moſt parts of the body, ſuperficial as well as internal; particularly the

But it is remarkable of the Laplanders, and given on the authority of Linnæus, that they know nothing of the ſcurvy, notwithſtanding their country lies ſo much farther to the northward, and they uſe no vegetable diet whatever, but live on the freſh blood, and unſalted fleſh of their rein-deer; to them, the moſt uſeful of all animals. And this we have confirmed, in the account of the voyages made from Aſia to America, by the Ruſſians; publiſhed by Jefferys in a thin quarto, 1761. We are here told, that "parties of Ruſſian hunters regularly ſpend the winter, "every other year, even at Nova Zembla, without receiving "any harm. Theſe people imitate the Samoiedes, in drinking "frequently the freſh blood of the rein-deer. The brandy, of "which they make proviſion for the voyage, is, fortunately, "expended before they reach the coaſt of Nova Zembla. "They know nothing of ſalt, or dry victuals, but live on the "freſh game which they catch, eſpecially on wild rein-deer. "Hunting however requires continual motion. And theſe "people are well provided with warm furred clothes."

the gums, and the legs; the texture of the former, being almoſt entirely cellular, (and theſe cells naturally occupied by pure blood) and the generally dependent ſtate of the latter, rendering theſe parts, of all others in the whole body, the moſt apt to receive, and retain, the ſtagnant blood; when its craſis comes to be deſtroyed, and it loſes that glutinous quality which, during health, hinders it from eſcaping through the pores in the coats of the blood-veſſels.

A dropſical indiſpoſition, eſpecially in the legs and breaſt, was frequently, but not always obſerved in the ſubjects that were opened, and the pericardium was ſometimes found diſtended with water: the water, thus collected, was often ſo ſharp as to ſhrivel the hands of the diſſector; and in ſome inſtances, where the ſkin happened to be broken, it irritated and feſtered the wound.

The fleſhy fibres were found ſo extremely lax and tender, and the bellies of the muſcles in the legs and thighs ſo ſtuffed with the effuſed ſtagnating blood, that it was always difficult, and ſometimes impoſſible to raiſe, or ſeparate one muſcle from another. He ſays that the quantity of this effuſed blood was amazing; in ſome bodies, it ſeemed that almoſt a fourth part of the whole maſs had eſcaped from the veſſels, and it often lay in large concretions on the perioſteum, and in ſome few inſtances under this membrane, immediately on the bone. And yet, notwithſtanding this diſſolved and depraved ſtate of the external fleſhy parts, the brain always appeared perfectly ſound,

and

and the viſcera of the abdomen, as well as thoſe in the thorax, were, in general, found quite uncorrupted. There were ſpots indeed, from extravaſated blood, obſerved on the meſentery, inteſtines, ſtomach, and omentum; but theſe ſpots were firm and free from any mortified taint; and, more than once, an effuſion of blood, as large as a hand's breadth, has been ſeen on the ſurface of the ſtomach, and what was remarkable, that very ſubject was not known while living to have made any complaint of ſickneſs, pain, or other diſorder, in either ſtomach or bowels.

Theſe circumſtances, and appearances, with many others that are recorded, (and for which we refer to the original) all prove to a demonſtration, the putreſcent ſtate of the blood; and yet, Dr. Lind takes no ſmall pains to combat the idea, of the ſcurvy's proceeding from animal putrefaction; a notion which, according to him, "may, and hath "miſled phyſicians to propoſe, and adminiſter "remedies for it, altogether ineffectual." *

He alſo, in the preface to this third edition, talks of the miſchief done by an attachment to deluſive

* Sir John Pringle however is of a very different opinion; for "is perſuaded, after long reflection, and the opportunities "he has had of converſing with thoſe, who, to much ſagacity, "had joined no ſmall experience in nautical practice, that "upon an examination of the ſeveral articles, which have ei-"ther been of old approven, or have of late been introduced "into the navy, it will appear, that though theſe means may "vary in form, and in their mode of operating, yet they all "ſome way contribute towards preventing *putrefaction*; whe-"ther

ſive theories ; ſays, " it is not probable that a re-
" medy for the ſcurvy will ever be diſcovered from
" a preconceived hypotheſis, or by ſpeculative
" men in the cloſet, who have never ſeen the
" the diſeaſe, or who have ſeen at moſt only a few
" caſes of it ;" and adds " that though a few par-
" tial facts, and obſervations may, for a little, flat-
" ter with hopes of greater ſucceſs, yet more en-
" larged experience muſt ever evince the fallacy of
" all poſitive aſſertions in the healing art." *

All this is the more ſtrange, as in the two former editions of his book, Dr. Lind embraced the hypotheſis of animal putrefaction, being the cauſe of the ſcurvy ; and if theſe effuſions of blood, from a deſtruction of its craſis, and the diſſolved ſtate of the muſcular fibres, together with the rotten condition of the mouth and gums, do not betray putreſcency, it is hard to ſay what does, or what other name we ſhall beſtow on this peculiar ſpecies of depravation which conſtitutes the ſcurvy.

If we call to mind the means by which the blood is preſerved in its natural craſis, ſmooth, mild, and glutinous, we ſhall the eaſier underſtand how it comes to degenerate into the ſcorbutic ſtate.

The

" ther of the air in the cloſer parts of a ſhip, of the meats, of
" the water, of the clothes and bedding, or of the body itſelf."
Diſcourſe upon ſome late improvements of the means for preſerving the health of mariners, page 13.

* We moſt ſincerely hope that theſe reflections were not intended to diſcredit a remedy for the ſcurvy, which was propoſed in the year 1762 ; as it might induce ſome people to ſuſpect the doctor of being jealous.

The blood, no doubt, derives its healthy properties, and maintains them, from due ſupplies of wholeſome food; while the inſoluble, ſuperfluous, effete, and acrid parts are carried off, by the ſeveral diſcharges of ſtool, urine, and perſpiration.

Our ſenſes of taſte, and ſmell, are ſufficient to inform us when our food is in a ſtate of ſoundneſs and ſweetneſs, and conſequently wholeſome; but it is from chemiſtry that we muſt learn the principles on which theſe qualities chiefly depend.

Experiments of various kinds,* have proved that the ſoundneſs of animal and vegetable ſubſtances, depends greatly, if not entirely, on the preſence of their *aerial principle*; ſince rottenneſs is never obſerved to take place, while this (generally known by the name of *fixed air*) can be prevented from eſcaping; and even when putrefaction has made a conſiderable progreſs, if air can be transferred, in ſufficient quantity, from ſome other ſubſtance, in a ſtate of efferveſcence or fermentation, into the putrid body, the offenſive ſmell of this will be deſtroyed; and if it be a bit of rotten fleſh, with which the experiment is made, the firmneſs of its fibres will be found, in ſome meaſure, reſtored.

The experiments of Dr. Hales, as well as many others made ſince his time, ſhew that the aerial principle is greatly connected with, and remarkably abundant

* Firſt made by the author; and ſince, repeated, and confirmed by a number of different gentlemen in England, France, and Italy.

abundant in, the gelatinous parts of animal bodies, and in the mucilage or farina of vegetables.

But these are the parts of our food which are most particularly nutritive; and Dr. Cullen, whose opinion on this, as on every other medical subject, must be allowed of the greatest weight, affirms, (in his Lectures on the Materia Medica) that the substances on which we feed, are nutritious, only in proportion to the quantities of *oil*, and *sugar*, which they respectively contain.

This oil, and sugar, are blended together in the gelatinous part of our animal food, and in the mucilaginous and farinaceous part of esculent vegetables; and while thus intimately combined, are not perceivable by our taste, though very capable of being developed, and rendered distinct, by the power of the digestive organs; for, in consequence of the changes produced during digestion, (in which, notwithstanding any cavilling that may be raised about terms, fermentation must be allowed to have a principal share) the oily, and the saccharine matter, become manifest to our senses, as we may see, and taste, in the milk of animals, (which is chiefly chyle, a little advanced in its progress toward sanguification) wherein the oil, is observed to separate spontaneously, and from which a quantity of actual sugar, may be obtained by a very simple process.

Thus much being premised, we can now readily comprehend how the blood may come to lose those qualities of smoothness, mildness, and tenacity, which are natural to it; for if in the first place, the

fluids, and organs subservient to digestion, should be so far distempered, or debilitated, that the nutritious parts of the food cannot be properly developed, the blood must be defrauded of its due supplies; which will also be the case, if the aliment should not originally contain enough of oily and saccharine matter, or should be so circumstanced, from being dried or salted, as to hinder the ready extrication of the nutritious parts; or lastly, if the natural discharges should be interrupted or suspended, so that the superfluous, acrid, and effete fluids are retained in the general mass; in all these instances, the blood must, of necessity, run into proportionate degrees of depravation.

And hence we may understand how it may possibly happen, that when persons are greatly weakened by some preceding disorder, and at the same time debarred the use of proper bodily exercise, the scorbutic diathesis should take place, even though they enjoy the advantages of pure air and wholesome diet. But these are solitary cases, and very rarely seen; for whenever the scurvy seizes numbers, and can be considered as an epidemic disease, it will be found to depend on a combination of the major part, or perhaps all, of the following circumstances:

1. A moist atmosphere, and more especially if cold be joined to this moisture. 2. Too long cessation from bodily exercise, whether it be from constraint, or a lazy slothful disposition. 3. Dejection of mind. 4. Neglect of cleanliness, and want of sufficient cloathing. 5. Want of wholesome drink, either of pure water, or fermented liquors.

quors. And, 6. above all, the being obliged to live continually on ſalted meats, perhaps not well cured, without a due proportion of the milder farinaceous or mucilaginous vegetables, ſufficient to correct the pernicious tendency of the ſalt, by ſupplying the bland oil and ſaccharine matter requiſite for the purpoſes of nutrition.

Theſe may all be held as *poſſible* cauſes of the ſcurvy, but (as hath been formerly explained, vol. 1. page 61.) they muſt always be joined to a certain inexplicable *morbific diſpoſition*, in the body of the perſon affected, before an *actual* diſeaſe can be produced.

The firſt indication of the ſcorbutic diatheſis, is generally a change of colour in the face, from the natural and healthy look, to a pale and bloated complexion, with a liſtleſſneſs, and averſion from every ſort of exerciſe; the gums ſoon after become itchy, ſwell, and are apt to bleed on the ſlighteſt touch; the breath grows offenſive, and the gums, ſwelling daily more and more, turn livid, and at length become extremely fungous and putrid; as being continually in contact with the external air, which, in every caſe, favours the putrefaction of ſubſtances diſpoſed to run into that ſtate, and which indeed is abſolutely requiſite for the production of actual rottenneſs.

The ſymptoms of the ſcurvy, like thoſe of every other diſeaſe, are ſomewhat different in different ſubjects, according to the various circumſtances of conſtitution; and they do not always proceed in the ſame regular courſe, in every patient.

But what is very remarkable in this diſeaſe, notwithſtanding the various and immenſe load of diſtreſs, under which the patients labour, there is no ſickneſs at the ſtomach, the appetite keeps up, and the ſenſes remain entire, almoſt to the very laſt; when lying at reſt, they make no complaints, and feel little diſtreſs or pain; but the moment they attempt to riſe, or ſtir themſelves, then, the breathing becomes difficult, with a kind of ſtraitneſs or catching, and great oppreſſion, and ſometimes they have been known to fall into a fatal ſyncope. This catching of the breath upon motion, with the loſs of ſtrength, dejection of ſpirit, and rotten gums, are held as the eſſential or diſtinguiſhing ſymptoms of the diſeaſe.

The ſkin is generally dry, except in the very laſt ſtage, when the patients become exceedingly ſubject to faintings, and then it grows clammy and moiſt: in ſome it has an anſerine appearance, but much oftener it is ſmooth and ſhining; and when examined is found ſpread over with ſpots, not riſing above the ſurface, of a reddiſh, bluiſh, livid, or purple colour, with a ſort of yellow rim round them. At firſt theſe ſpots are for the moſt part ſmall, but in time they increaſe to large blotches. The legs and thighs are the places where they are moſtly ſeen, more rarely on the head and face. Many have a ſwelling of the legs, which is harder, and retains the impreſſion of the finger longer, than the common dropſical or truly œdematous ſwellings.

The ſlighteſt wounds, and bruiſes in ſcorbutic habits, degenerate into foul and untoward ulcers.

And

And the appearance of these ulcers is so singular and uniform, that they are easily distinguished from all others. Scorbutic ulcers afford no good digestion, but a thin and fœtid ichor mixed with blood, which at length has the appearance of coagulated gore, lying caked on the surface of the sore, not to be separated, or wiped off without some difficulty. The flesh underneath these sloughs, feels to the probe soft and spungy, and is very putrid. Neither detergents, nor escharotics are here of any service; for though such sloughs be with great pains taken away, they are found again at the next dressing, where the same sanguineous putrid appearance always presents itself. Their edges are generally of a livid colour, and puffed up with excrescences of proud flesh, arising from below the skin. As the violence of the disease increases, the ulcers shoot out a soft bloody fungus, which often rises in a night's time to a monstrous size, and although destroyed by cauteries, actual or potential, or cut away with the knife, is found at next dressing as large as ever. It is a good while, however, before these ulcers, bad as they are, come to affect the bones with rottenness.

These appearances will always serve to assure us that an ulcer is scorbutic, and should put us on our guard with respect to the giving mercurials, which are the most pernicious things that can be administered in these cases.

Scorbutic people, as the disease advances, are seldom free from pains; * though they have not the

* The pains in this disease seem to arise from the distraction of the sensible fibres, by the extravasated blood being forced into

the ſame ſeat in all, and often in the ſame perſon ſhift their place. Some complain of univerſal pain in all their bones, but moſt violent in the limbs, and eſpecially the joints; the moſt frequent ſeat of their pain, however, is ſome part of the breaſt.

The ſtate of the bowels is various: in ſome there is an obſtinate coſtiveneſs; in others a tendency to a flux, with extremely fœtid ſtools: the urine is alſo rank and fœtid, generally high-coloured; and when it has ſtood for ſome hours, throws up an oily ſcum on the ſurface. The pulſe is variable, but moſt commonly ſlower and more feeble than in the time of perfect health. A ſtiffneſs in the tendons, and weakneſs in the joints of the knees, appear early in the diſeaſe; but as it grows more inveterate, the patients generally loſe the uſe of their limbs altogether; having a contraction of the flexor-tendons in the ham, with a ſwelling and pain in the joint of the knee. Some have their legs monſtrouſly ſwelled, and covered over with livid ſpots or ecchymoſes; others have hard tumours there; ſome, though without ſwelling, have the calves of the legs, and the fleſh of the thighs quite indurated.

As perſons far gone in the ſcurvy are apt to faint, and even expire on being moved and brought out into the freſh air, the utmoſt care and circumſpection

into the interſtices of the perioſteum, and of the tendinous, and ligamentous parts; whoſe texture being ſo firm, the fibres are liable to the higher degrees of tenſion, and conſequently of pain.

ſpection are requiſite when it is neceſſary to ſtir or remove them.

Scorbutic patients are at all times, but more eſpecially as the diſeaſe advances, extremely ſubject to profuſe bleedings, from different parts of the body; as from the noſe, gums, inteſtines, lungs, &c. and from their ulcers, which generally bleed plentifully, if the fungus be cut away. It is not eaſy to conceive, a more diſmal and diverſified ſcene of miſery, than what is beheld in the third and laſt ſtage of this diſtemper; it being then, that the anomalous and more extraordinary ſymptoms appear, ſuch as the burſting out of old wounds, and the diſſolution of old fractures that have been long united.

The ſcurvy may be *prevented*, by obviating and correcting thoſe circumſtances in reſpect of the non-naturals which were mentioned as contributing to the diſeaſe, and laid down as *poſſible cauſes*.

It is therefore a duty highly incumbent on officers commanding at ſea, or in garriſons, to uſe every poſſible precaution, and in the firſt place to correct the coldneſs and moiſture of the atmoſphere, by ſufficient fires; in the next, to ſee that their men are lodged in dry, clean, and well ventilated births, or apartments; thirdly, to promote cheerfulneſs, and enjoin frequent exerciſe, which alone is of infinite uſe in preventing the ſcurvy; fourthly, to take care that the cloathing be proper, and cleanlineſs of perſon ſtrictly obſerved; fifthly, to ſupply them with wholeſome drink, either pure water, or ſound fermented liquors; and if ſpirits be allowed,

allowed, to have them properly diluted with water, and ſweetened with melaſſes or coarſe ſugar; and laſtly, to order the ſalted meats to be ſparingly uſed, or ſometimes entirely abſtained from; and, in their place, let the people live on different compoſitions of the dried vegetables; freſh meat, and recent vegetables, being introduced, as often as they can poſſibly be procured.

A cloſe attention to theſe matters will, in general, prevent the ſcurvy from making its appearance at all, and will always hinder it from ſpreading its influence far; but when theſe precautions have been neglected, or the circumſtances ſuch that they cannot be put in practice, and the diſeaſe hath actually taken place, our whole endeavour muſt be to reſtore the blood to its original ſtate of ſoundneſs: and happily, ſuch is the nature of this diſeaſe (which confirms the hypotheſis that it is ſeated in the groſs fluids, and particularly the blood) that if a ſufficiency of new matter, of the truly mild nutritious ſort, can be thrown into the circulation, while the fleſhy fibres retain any tolerable degree of firmneſs, the patient will recover; and that, in a ſurprizingly ſhort ſpace of time, provided a pure air, comfortable lodgings, ſufficient cloathing, cleanlineſs, and exerciſe, lend their neceſſary aid.

This being the caſe, the plan of treatment is to be conducted almoſt entirely in the dietetic way, as the change in the maſs of blood, which it is neceſſary to produce, muſt be brought about by things that can be received into the ſtomach by pints, or pounds, and not by thoſe which are adminiſtered in drops

drops or grains, drachms or ounces; for here, as the ſubtile fluids are not ſenſibly affected, and there is no diſorder of the nervous ſyſtem, we have no need of thoſe active drugs, which are indiſpenſibly neceſſary in febrile, or nervous diſeaſes: the ſcorbutic diatheſis being quite oppoſite to that which tends to produce a fever, or any ſpecies of ſpaſmodic diſorder; nay Dr. Lind ſays, he has repeatedly found, that even the infection of an hoſpital fever, is long reſiſted by a ſcorbutic habit.

It will now naturally occur to the reader, what thoſe alimentary ſubſtances muſt be, which bid the faireſt to reſtore the blood to its healthy ſtate; and he needs ſcarcely to be told, that they are of thoſe kinds, which the ſtomach can bear with pleaſure, though taken in large quantities; which abound in jelly, or mucilage; and which allow theſe nutritious parts to be eaſily developed; for though the viſcera in ſcorbutic patients may be all perfectly ſound, yet we cannot expect, that either the digeſtive fluids, or organs, ſhould poſſeſs the ſame degrees of power, which enable them, during health, to convert the crude dry farinacea, and the hard ſalted fleſh of animals into nouriſhment. We muſt therefore ſearch for the *antiſcorbutic virtue* in the tender ſweet fleſh of graminivorous animals; * in new

* When the crew of one of the Ruſſian veſſels, that was employed in exploring the coaſt of America, was wrecked on a deſert iſland, they were in a moſt miſerable condition with the ſcurvy. It was the beginning of winter, and the ground entirely covered with ſnow, ſo that no freſh vegetable production of any kind could poſſibly be procured; the ſick however began to recover

new milk; and in the mucilaginous juices of recent vegetables, whether they be fruits, leaves, or roots. And provided they be freſh, and ſucculent, and of ſuch mildneſs as will permit them to be abundantly taken, it is of little importance whether they be ſweet or ſour, aceſcent or alcaleſcent; for ſuch is the power of the alimentary fermentation, that by the time the chyle is ready to enter the lacteals, their native qualities are obliterated, and the oily, and ſaccharine matter, which lay hid in the mucilage, entirely extricated.

The ſour juices of lemons, oranges, and limes, have been generally held as antiſcorbutics in an eminent degree, and their power aſcribed to their acid; from an idea that acids of all kinds are the only correctors of putrefaction. But the general current of practical obſervations ſhews, and our experiments confirm it, that the virtue of theſe juices (and we preſume, of every other that has been known to cure the ſcurvy) depends on their *aerial principle*, and conſequently reſides in the mucilage, whether it be ſweet or ſour; accordingly, while perfectly recent and in the mucilaginous ſtate, and eſpecially

recover immediately, though they had nothing to eat, ſave the unſalted fleſh and fat of different amphibious animals: but when the one called the manati, or ſea-cow, viſited the coaſts, they gave the preference to its fleſh, and ſoon got entirely rid of all their complaints.

This is a graminivorous animal, different from that which goes under the ſame name on the Labradore coaſt, feeding ſolely on ſea-graſs, and other plants that grow about the rocks; the fleſh of the old ones when thoroughly boiled, is deſcribed as not inferior to beef; and that of the calves, is ſaid to eat as well, as young pork, or veal. See the voyages of the Ruſſians, already quoted, page 101, 103.

eſpecially if mixed with wine and ſugar, * the juices of any one of theſe fruits, will be found a moſt grateful and powerful antiſcorbutic.

While this very pleaſant mixture, which is both a cordial and an antiſeptic, may be had, it would be needleſs to think of preſcribing any other; but when the freſh juice cannot be procured, we muſt have recourſe to ſuch other things as may be obtained. But the various modes of combining, and adminiſtering theſe, ſo as to render them perfectly agreeable to the ſtomach, muſt always be regulated by circumſtances, and therefore, it will be in vain to lay down particular directions; ſince all that we have to do, is to fix on ſuch fruits, and other freſh vegetables, as can be moſt conveniently had, and taken, and contrive to give them in thoſe forms, either alone, or boiled up with fleſh meat into ſoups, that will allow the patients to conſume the greateſt quantities.

The firſt promiſing alteration from ſuch a courſe, is uſually a gentle diarrhœa; and if, in a few days, the

* Dr. Lind obſerving "that the lemon juice when given by "itſelf undiluted, was apt, eſpecially if over-doſed, to have too "violent an operation, by occaſioning ſickneſs and pain at the "ſtomach, and ſometimes a vomiting; he therefore found it "neceſſary to add wine and ſugar. A pint of Madeira wine, "and two ounces of ſugar, were put to four ounces and a half "of juice, and this quantity was found ſufficient for weak pa-"tients to uſe in twenty-four hours: ſuch as were very weak "ſipt a little of this frequently, according as their ſtrength "would permit; others who were ſtronger took about two "ounces of it every four hours; and when the patients grew "ſtill ſtronger, they were allowed eight ounces of lemon juice "in twenty-four hours." (Page 521 of the 3d edition.)

the ſkin becomes ſoft and moiſt, it is an infallible ſign of recovery; eſpecially if the patient gains ſtrength, and can bear being ſtirred, or carried into the open air, without fainting.

But if the belly ſhould not be looſened by the uſe of the freſh vegetables, nor the ſkin become ſoft and moiſt, then they muſt be aſſiſted by ſtewed prunes, or a decoction of tamarinds with cream of tartar, in order to abate the coſtiveneſs; and by drinking a light decoction of the woods, and warm bathing, in order to relax the pores of the ſkin; for nothing contributes more to the recovery of ſcorbutic patients, than moderate ſweating.

With regard to particular ſymptoms, antiſeptic mouth-waters compoſed of a decoction of the cortex and tincture of roſes, with ſolution of myrrh, muſt be uſed occaſionally, in order to cleanſe the mouth, and give firmneſs to the ſpungy gums. Swelled and indurated limbs, and ſtiffened joints, muſt be bathed with warm vinegar, and relaxed by the ſteam of warm water, repeatedly conveyed to them, and confined to the parts by means of cloſe blankets: ulcers on the legs muſt never be treated with unctuous applications, nor ſharp eſcharotics, but the dreſſings ſhould conſiſt of lint or ſoft rags, dipt in a ſtrong decoction of Peruvian bark.

This diſeaſe at no time requires, or indeed bears, large evacuations, either by bleeding or purging; and, as hath been already mentioned, the belly muſt only be kept open by the freſh vegetables, or the mildeſt laxatives. But we are always to be careful that ſcorbutic perſons, after a long abſtinence from

from greens and fruits, be not permitted to eat voraciouſly at firſt, leſt they fall into a fatal dyſentery.

Thus much may ſerve to ſhew what the general plan of treatment ought to be; with reſpect to the variations that may be required, according to the different ſtate of the diſeaſe, in different ſubjects, we refer to Dr. Lind's excellent treatiſe; a book which ought to be in the hands of every practitioner, but more eſpecially thoſe, who are employed in the navy, or army.

All this, however, that has been laid down as neceſſary towards the cure, ſuppoſes the patients to be in ſituations where they can be plentifully furniſhed with all the requiſites; but unhappily, theſe things are not to be procured at ſea, and often deficient in garriſons; therefore, in order that a remedy for the ſcurvy might never be wanting, the author, in the year 1762, firſt conceived the notion, that *infuſion of malt*, commonly termed *Wort*, might be ſubſtituted for the common antiſcorbutics.

The circumſtance that firſt gave riſe to this idea, * and the ſeries of experiments which confirmed him in the opinion, that wort would cure the ſcurvy, were all thrown out to the public, in a volume

* It was the hearing it mentioned, at a chemical lecture, by Dr. Hutcheſon, (Fellow of the College of Phyſicians, and, at that time, Lecturer of Chemiſtry in the Univerſity of Dublin) that the antiſcorbutic power of freſh vegetables, depends *ſolely* on their *fermenting quality*. This hypotheſis however, is acknowledged by Dr. Hutcheſon, to have been originally Dr. Cullen's.

lume of *Experimental Eſſays*, in 1764; and a propoſal then made, for trying the effects of this remedy, at ſea.

More than three years elapſed, before any account arrived, of the experiment's having been made; at length, ten hiſtories of caſes were received, wherein the wort had been tried, with very remarkable ſucceſs; and this being judged a matter of much importance to the ſeafaring part of mankind, theſe were immediately communicated to the public, in a pamphlet, with the title of *An Hiſtorical Account of a New Method of Treating the Scurvy at Sea.*

This was in 1767; but ſince that time a conſiderable number of Letters, and Medical Journals, ſufficient to make up a ſmall volume, have been tranſmitted to the author, (particularly by the ſurgeons of his Majeſty's ſhips that have been employed of late years, for making diſcoveries in the Southern hemiſphere;) theſe he intends publiſhing, in order that the faculty may judge for themſelves, how far his propoſed remedy has been found to anſwer. Certain it is, that in many inſtances it has ſucceeded beyond expectation; in others it has fallen ſhort; but whether this was owing to the untoward ſituation of the patients; inattention, on the part of the perſons who were charged with the adminiſtration of the wort, not preparing it properly, or not giving it in ſufficient quantity; or to its own want of power, muſt be collected from the caſes and journals themſelves.

During

During captain Cook's laſt voyage, the moſt remarkable, in reſpect of the healthineſs of the crew, that ever was performed, the wort is acknowledged to have been of ſingular uſe.

In a letter, which this very celebrated and ſucceſsful circum-navigator wrote to Sir John Pringle, he gives an account of the methods purſued, for preſerving the health of his people; and which were productive of ſuch happy effects, that he performed "a voyage of three years, and eighteen "days, through all the climates from 52° north, to "71° ſouth, with the loſs of one man only by diſ-"eaſe, and who died of a complicated and linger-"ing illneſs, without any mixture of ſcurvy. Two "others were unfortunately drowned, and one "killed by a fall, ſo that out of the whole number (118) with which he ſet out from England, he loſt only four.

He ſays, that much was owing to the extraordinary attention of the Admiralty, in cauſing ſuch articles to be put on board, as either by experience, or conjecture were judged to tend moſt to preſerve the health of ſeamen; and with reſpect to the wort, he expreſſeth himſelf as follows.

"We had on board a large quantity of *malt*, of "which was made *ſweet wort*, and given (not only "to thoſe men who had manifeſt ſymptoms of the "ſcurvy, but to ſuch alſo as were, from circum-"ſtances, judged to be moſt liable to that diſor-"der) from one or two to three pints in the day to "each man, or in ſuch proportion as the ſurgeon

" thought neceſſary ; which ſometimes amounted " to three quarts, in the twenty-four hours ; this " is without doubt one of the beſt anti-ſcorbutic " ſea medicines yet found out ; and if given in " time, will, with proper attention to other " things, I am perſuaded, prevent the ſcurvy " from making any great progreſs for a conſider- " able time ; but, I am not altogether of opini- " on, that it will cure it, in an advanced ſtate, at " ſea."

On this laſt point however, the Captain and his Surgeon * differ, for this gentleman poſitively aſ- ſerts, and his journal (in the author's poſſeſſion) confirms it, that the infuſion of malt did effect a cure, in a confirmed caſe, and at ſea. But this matter will be thoroughly cleared up, when the journal itſelf comes to be publiſhed. †

The

* Mr. Patten, of whoſe abilities and attention, Sir John Pringle bears honourable teſtimony, in the diſcourſe already mentioned, page 55.

† Captain Cook was alſo provided with a large ſtock of *ſour krout:* (cabbage leaves cut ſmall, fermented and ſtopped in the ſecond ſtage of fermentation ;) a pound of this was ſerved to each man, twice a week while they were at ſea. He had alſo a libe- ral ſupply of *portable ſoup* ; of which, the men had generally an ounce three days in the week, boiled up with their peaſe ; and ſometimes it was ſerved to them oftener ; and when they could get freſh greens, it was boiled up with them, and made ſuch an agreeable meſs, that it was the means of making the people eat a greater quantity of greens than they would otherwiſe have done. And what was ſtill of further advantage, they were fur- niſhed with *ſugar*, in lieu of butter or oil, which is ſeldom of the ſweeteſt ſort ; ſo that the crew were undoubtedly great gainers by the exchange.

In

The malt, being thoroughly dried, and packed up in ſmall caſks, is carried to ſea, where it will keep ſound, in every variety of climate, for at leaſt two years; when wanted for uſe, it is to be ground in a hand-mill and the infuſion prepared from day to day, by pouring *three* meaſures of boiling water, on *one* of the ground malt; the mixture, being well maſhed, is left to infuſe for ten or twelve hours, and the clear infuſion then ſtrained off. The patients are to drink it in ſuch quantities as may be deemed neceſſary, from one, to three quarts, in the courſe of the twenty-four hours; a panado is alſo to be made of it, by adding biſcuit, and currants or raiſins, and this palatable meſs, is uſed by way of ſolid food. This courſe of diet, like that of the recent vegetables, generally keeps the bowels ſufficiently open; but in caſes where coſtiveneſs, nevertheleſs, prevails, gentle laxatives muſt be interpoſed from time to time, together with diaphoretics, and the topical aſſiſtants, fomentations and gargles, as in the common way of management.

Newly brewed *ſpruce beer* (made from a decoction of the tops of the ſpruce-fir, and melaſſes) is an excellent antiſcorbutic; acts in the ſame way that the wort does, and will be found of equal efficacy, therefore may be ſubſtituted. But in ſituations where neither the one, nor the other, can be had, a

In addition to all theſe advantages of being ſo well provided with every neceſſary, either in the way of diet or medicine, captain Cook was remarkably attentive to all the circumſtances reſpecting cleanlineſs, exerciſe, ſufficient cloathing, proviſion of pure water, and purification of the air, in the cloſer parts of the ſhip.

moſt ſalutary meſs may be prepared from *oatmeal*, by infuſing it in water, in a wooden veſſel, till it ferments, and begins to turn ſouriſh, which generally happens, in moderately warm weather, in the ſpace of two days. The liquor is then ſtrained off from the grounds, and boiled down to the conſiſtence of a jelly, which is to be eaten with wine and ſugar; or with butter and ſugar.

Nothing is more commonly talked of, than a *land-ſcurvy*, as a diſtinct ſpecies of diſeaſe, from this which has been now deſcribed; but no writer has yet given a deſcription ſo clear as to enable us to diſtinguiſh it from the various kinds of cutaneous foulneſs and eruption, which indeed are vulgarly termed ſcorbutic, but which are akin to the itch or leproſy, and, for the moſt part, require mercurials.

CHAP. VII.

Deſcription of the Scrofula, and Methods of Treatment.

THE *ſcrofula*, being one of thoſe diſeaſes whoſe name is apt to give offence, it is often paſſed under the denomination of a ſcurvy; not that there is the leaſt affinity between them.

The ſcrofula is moſtly hereditary, but inſtances are known, where it has ſeemed to have been caught from a nurſe.

It

It is not however of ſuch an infectious nature, as to be capable, like the itch or lues venerea, of being communicated by contact; but as it is always beſt to err on the ſafe ſide, it is moſt adviſable to order ſcrofulous patients to ſleep alone.

It is generally before puberty that the diſorder becomes manifeſt; after that period, the conſtitution, for the moſt part, acquires ſufficient firmneſs, to prevent this ſpecies of morbific matter from producing actual diſeaſe.

The ſcrofulous humour principally attacks the glandular parts, and the bones, and it firſt appears in little kernels, or lumpy indolent ſwellings down the ſides of the neck, or in the arm-pits, and about the breaſts; or in ſwellings of the joints, either of the fingers, wriſt, knee, elbow, or ankle.

A ſtrain of any of theſe joints will often give occaſion for the diſeaſe to ſhew itſelf. But where no ſuch ſuch external injury has preceded, the ſwelling comes on gradually, and without any pain or diſcolouring.

In proceſs of time, as the humour acquires ſharpneſs ſufficient to irritate and corrode the living ſolids, the parts affected grow hot, red, and painful, and end in a ſuppuration. The matter of the abſceſs is thin, and mixed with a whitiſh curdly ſubſtance; and this curdly matter which is diſcharged after the opening of ſcrofulous ſwellings, together with the hard lumpy feel which they

have before ſuppuration, is the circumſtance that particularly diſtinguiſhes them from every other ſpecies of tumour.

A thickneſs of the upper lip may be held as peculiar to ſcrofulous habits; and where we meet with this appearance, even though there ſhould be no other, it gives ſufficient room to ſuſpect a ſcrofulous acrimony; for very often this humour does not ſhew itſelf in the exterior habit, but ſettles internally: the meſenteric glands in theſe caſes are generally found ſtuffed up and ſwelled, with a cheeſy, purulent, or earthy matter; whence waſting, hectic fever, and death; and very often the ſame kinds of matter ſettle on the lymphatic glands in the lungs, producing cough, dyſpnœa, and other ſymptoms of phthiſis, already deſcribed.

As the ſcrofulous acrimony is of ſuch a nature, that it can lurk long in the body without ſhewing itſelf, it neceſſarily muſt be very difficult to conquer, becauſe of the firm hold that it gets of the conſtitution, before people are aware of its exiſtence.

There are, however, three things that have been found to produce happy effects in ſubduing this acrimony, and theſe are, the *ſea-water*, the *cortex*, and the *cicuta*. But the variety of circumſtances will render it neceſſary to make a choice between theſe different remedies.

In general it may be laid down, that the uſe of ſea-water (that is, drinking and bathing, according to

to Dr. Ruſſel's ſcheme*) will anſwer beſt before there is any ſuppuration, or ſymptoms of tabes; the cortex, when there are running ſores, and a degree of hectic fever; and the cicuta, in old inveterate caſes, approaching to the ſcirrhous or cancerous ſtate.

The *ſea-water* ſhould only be taken in ſuch quantity as ſhall be ſufficient to keep the belly gently open, and when it creates a diſtreſſing degree of thirſt, it may be mixed with common freſh water.

The *lime-water tincture* is the moſt efficacious way of adminiſtering the *cortex*, in ſcrofulous caſes; and either the extract or the freſh juice of the *cicuta* may be given.

The *cicuta* is not only found to promote the ſuppuration of ſcrofulous tumours, but it alſo meliorates the diſcharge from the ulcers; mercury likewiſe promotes the ſuppuration of theſe tumours, but this is a way of termination that is far from being deſirable, as the ulcers which ſucceed are generally very ſlow in healing; therefore a reſolution is what we ought rather to wiſh for: but when ſcrofulous ſwellings do ſuppurate, they ought never to be opened until all the lumpy hardneſs is melted down; and it is worthy of obſervation, that theſe are a kind of abſceſſes which often do better when left to break of themſelves, than when they are opened by Art: and the ſinuſes that form afterwards, are ſeldom cured by dilating; for, until the acrimony is either ſubdued, or the conſtitution

* Laid down in his Treatiſe on the Uſe of Sea-Water.

conſtitution acquires ſufficient firmneſs, theſe ſores never heal up, and therefore it is needleſs, as well as cruel, to torment the patients with frequent inciſions.

With the view to ſoften and diſperſe ſcrofulous ſwellings, rubbing them with the alga marina or common ſea-wrack, and applying the ſame by way of cataplaſm, is ſometimes found uſeful; a mixture of freſh gall with ſoap liniment, is alſo a powerful reſolvent.

The ſulphureous waters are eſteemed particularly ſalutary in ſcrofulous caſes of long ſtanding; but in general it requires the perſeverance of ſome years to accompliſh a perfect cure; and it is frequently found, with us, that nothing but the removal of the patient into a ſouthern climate, will completely eſtabliſh a firm ſtate of health.

CHAP. VIII.

Of the Cancer.

WE may ſometimes trace the *cancer* from a *ſcrofula*; the perſons afflicted with that diſeaſe in advanced life being frequently ſuch as have ſhewn ſigns of this in their youth: hence there is reaſon to conſider the acrimony which gives riſe to the cancer, as having ſome affinity with that which produces the Evil.

The cancer, like the ſcrofula, attacks chiefly the glandular parts and the bones; the lips, noſe, breaſts,

breaſts, and axillary glands, are the moſt frequent ſeats of the diſeaſe; but ſometimes it ſettles on the uterus, the penis, or lower part of the inteſtinum rectum.

Cancerous ſwellings are lumpy, like the ſcrofulous; but exceed theſe, as well as every other ſpecies of tumour, in hardneſs: before they become painful, they are termed *Schirrhi*; and in this ſtate the ſkin is ſeldom diſcoloured, but after the pain begins, it turns duſkiſh or livid, and the ſubcutaneous veins of the part affected put on a varicous appearance.

A cancer may remain in the indolent ſtate, and without ulceration, for years; during which, it is called an *Occult Cancer*; but when the humour acquires ſuch ſharpneſs as to corrode the teguments, it gets the name of an *Open Cancer*. The ichor which is diſcharged, is generally ſo cauſtic, that it quickly erodes the adjacent parts, whether they be hard or ſoft, and thus conſtitutes a moſt frightful ſpecies of ulcer, that no application yet found out is capable of healing; neither has there been any alterative as yet diſcovered, capable of correcting or ſubduing the cancerous acrimony; ſo that the only remedy is extirpation, either by the knife or cauſtic, when the part which is the ſeat of the diſeaſe happens to be ſuch, that it can be completely removed without material injury to the reſt of the body.

The choice of theſe two methods of extirpation muſt be directed by the particular circumſtances of the caſe; but when a cauſtic is judged preferable

ferable to the knife, the difficulty is to find one that will not ſpread, laterally, further than is intended, which the lapis infernalis and lunar cauſtic conſtantly do, in ſpite of every contrivance to prevent them.

The compoſition which is kept a ſecret in Ireland by a family of the name of Plunket, and in England by ſome perſons to whom they have ſold it, is believed to conſiſt of the things which are mentioned * in the note. It is a very powerful eſcharotic, and occaſions moſt acute pain; but its excellence is, that it does not extend its operation laterally.

Every body knows how much the *cicuta* has been cried up in Germany, and how little it has ſucceeded in France and in England: in Ireland there have been a few caſes where it really has done ſervice, and it ought not to be altogether thrown aſide. The freſh juice has been found more efficacious than the extract; the patients begin with four or five drops, and increaſe it gradually. The application of this herb externally, has been long directed in cancerous caſes; and is generally of ſome ſervice, both in rendering the ulcers leſs

* Take of the leaves and ſtalks of the ranunculus flammeus two pugils; of thoſe of cotula fœtida one pugil; white arſenic, two drachms; flowers of ſulphur, one drachm. Mix the whole, and rub them into a powder. This powder, made into a paſte with the white of an egg, is applied to the cancerous part which it is intended to corrode; and being covered with a piece of thin bladder, ſmeared alſo with the white of an egg, is ſuffered to lie on, from twenty-four, to forty-eight hours; afterwards the eſchar is to be treated with ſoftening digeſtives, as in ordinary caſes.

leſs foul and corroſive, and in ſoftening down the hardneſſes.

Perſons labouring under a cancer ſhould live on the lighter and milder kinds of food, avoid every thing ſalt or heating, and ſhould purge gently from time to time with the neutral ſalts, or the natural purging waters.

We refer the reader to the third volume of the Medical Commentaries, page 388, and to the fourth, page 54, for extracts from two diſſertations on the cancer; the one by Dr. Peyrilhe, the other by M. Le Febure.

The firſt mentioned author, is of opinion that the cancerous virus is of a putrid nature, and may be corrected by the external application of the *Gas Sylveſtre*, or *fixed air* ſet free from ſubſtances in a ſtate of effervescence or fermentation, the patient, in the mean while, making uſe of ſuch a diet as eaſily ferments, and yields the greateſt proportion of fixed air; preciſely ſuch a courſe as was preſcribed for the ſcurvy. M. Le Febure proceeds on a very different plan, for he recommends *arſenic*, both internally and externally, and affirms that he has found it ſucceed: he orders four grains of the arſenic to be diſſolved in a pint of water; and the doſe of this ſolution is one table ſpoonful, every morning, with an equal quantity of milk, and half an ounce of ſyrup of poppies.

CHAP.

CHAP. IX.

Deſcription of the Lues Venerea; and Methods of Treatment.

ASTRUC, who writes the elaborate and complete hiſtory of the *lues venerea*, is fully convinced that it is a new diſeaſe, which never appeared in Europe till ſome time between the years 1494 and 1496, having been imported from the New World by the companions of the famous Chriſtopher Columbus: hence it appears, that the morbific matter which produces the lues venerea, like that which gives riſe to the ſmall-pox, is of a ſpecific nature, and was originally peculiar to one quarter of the globe, from whence it has now ſpread to all the other three.

But the venereal infection cannot, like the contagious miaſmata which produce ſeveral ſpecies of fever, be carried in the air, and wafted from place to place; for unleſs it be tranſmitted from parents, (which too often happens) there is no other way of contracting the diſeaſe, but by actually touching ſome perſon who is affected.

Thus, when a nurſe happens to labour under the diſeaſe, the infant that ſhe ſuckles will imbibe the infection; as, on the other hand, when the child is infected, the nurſe is liable to receive it: and there have even been inſtances known of lying-in women being diſordered, from having employed a perſon

perſon to draw their breaſts, who happened to have venereal ulcers in the throat. It may be caught by touching venereal ſores, if the cuticle of the fingers happens to be abraded, or torn, ſo that the virus can find admittance through this undefended part of the ſkin ;* but by far the moſt ready way of contracting this diſeaſe is by coition, the genital parts being of all others the moſt liable to admit the virulent particles, on account of their ſpongy texture, and being covered with a delicate cuticle, whoſe pores are rendered more bibulous by the continual moiſture peculiar to theſe parts of the body. When the diſorder is communicated by contact, the places where the morbific matter enters, are generally thoſe where it firſt makes its appearance ; and as coition is the moſt common way of contracting it, ſo the firſt ſymptoms uſually appear on, or ſomewhere near, the pudenda.

We ſhall defer the conſideration of theſe local venereal complaints, till we come to ſhew the methods of treating the diſeaſes of the ſecond claſs ; and, at preſent, only deſcribe the ſymptoms, and point out the moſt ſucceſsful ways of management, when the virus is ſuppoſed to have tainted the whole habit.

The patient's own account will, for the moſt part, help us to diſtinguiſh the diſeaſe ; but there are ſometimes caſes wherein we cannot avail ourſelves of this information, and where, inſtead of confeſſing,

* It is in this way, that accoucheurs, and midwives have ſometimes been infected, and that, moſt ſeverely. The moſt inveterate pox the author ever ſaw, was caught by a midwife, who happened to have a whitlow on one of her fingers, when ſhe delivered a woman, ill of the lues venerea.

confeſſing, the parties ſhall conceal all the circumſtances; while again, on the other hand, we ſhall now and then meet with people who perſuade themſelves that ſymptoms are venereal, which in reality are owing to ſome other cauſe; and therefore it is of the utmoſt importance to inform ourſelves thoroughly, of the nature of thoſe ſymptoms and appearances, which may be conſidered as pathognomic ſigns of the lues venerea.

In the firſt place, when we find that the local ſymptoms, ſuch as chancres, buboes, phymoſis, and the like, do not give way to the uſual methods; or when theſe complaints, after having been cured, break out again without a freſh infection, we may juſtly ſuſpect that the virus has got hold of the general maſs of lymph; but if, at the ſame time, we ſee ulcers break out in the throat, and obſerve the face to be deformed by callous tubercles covered with a brown or yellow ſcab, we may be aſſured that the caſe is now become a confirmed lues, which will require a mercurial courſe.

But as theſe eruptions, and ulcerations of the throat, ſometimes come unattended with any of the ſymptoms peculiar to the genitals, it will be neceſſary to lay down the diſtinguiſhing marks that ſhew them to be truly venereal, and different from ſuch as are the produce of a ſcorbutic, or leprous acrimony.

When eruptions of the furfuraceous and ſuperficial kind are venereal, they are not attended with itching; and the ſcale being picked off, the ſkin appears

appears of a reddiſh brown, or rather copper-colour underneath; whereas leprous eruptions are itchy, throw off a greater quantity of ſcales, and riſe in larger blotches, eſpecially about the joints of the knees and elbows. Venereal tubercles or puſtules, are eaſily diſtinguiſhed from carbuncles of the face, by not occupying the cheeks or the noſe, nor as having a purulent apex, but are covered at top, either with a dry branny ſcurf, like the ſuperficial eruptions juſt now mentioned, or elſe with a hard dry ſcab, of a tawny yellow hue; they particularly break out among the hair, or near to it; on the forehead, or on the temples.

Venereal ulcers affecting the mouth are diſtinguiſhable from thoſe which are ſcorbutic, in the following manner: 1. Venereal ulcers firſt affect the tonſils, fauces and uvula, then the gums, but theſe very rarely: on the contrary, ſcorbutic ulcers affect the gums firſt of all; then the fauces, tonſils, and uvula. 2. Venereal ulcers frequently ſpread to the noſe, ſcorbutic ones never. 3. Venereal ulcers are callous in the edges; ſcorbutic ones are not ſo. 4. Venereal ulcers are circumſcribed, and, for the moſt part, are circular, at leaſt they are confined to certain places; ſcorbutic ones again are of a more irregular form, ſpread wider, and frequently affect the whole mouth. 5. Venereal ulcers are, for the moſt part, hollow, and generally covered at bottom with a white or yellowiſh ſlough; but ſcorbutic ones are more apt to grow up into looſe fungi. 6. Venereal ulcers are red in their circumference, but ſcorbutic ones are always livid. 7. Venereal ulcers frequently rot the ſubjacent bones,

bones, the ſcorbutic ones ſeldom or ever. 8. And laſtly, Venereal ulcers are moſt commonly combined with other ſymptoms which are known to be venereal; ſcorbutic ones with the diſtinguiſhing ſigns of the ſcurvy, ſuch as the ſtrait breathing, liſtneſſneſs, ſwelling of the legs, rotten gums, &c.

Another ſure ſign of the confirmed lues, are certain deep-ſeated nocturnal pains, particularly of the ſhins, arms, and head. As for any ſuperficial wandering pains, that, have no fixed ſeat, and which affect the membranes of the muſcles and ligaments of the joints, they, for the moſt part, will be found to belong to the gout, or, rheumatiſm, and can never be conſidered as venereal, unleſs accompanied with ſome other evident ſigns; but with regard to the pains that are deeply ſeated, and always fixed to the ſame place, and which affect the middle and more ſolid part of the ulna, tibia, and bones of the cranium, and rage chiefly, and with greateſt violence, in the fore-part of the night, ſo that the patient can get no reſt till morning approaches, theſe may ſerve to convince us that the diſeaſe has ſpread itſelf throughout the whole habit, whether they be accompanied with other ſymptoms of the lues or not. *Gummata* in the fleſhy parts, *nodes* in the perioſteum, *ganglia* upon the tendons, *tophi* upon the ligaments, *exoſtoſes* upon the bones, and *fici* at the verge of the anus, are all of them ſigns of the confirmed lues: theſe are hard indolent ſwellings, but as they ſometimes ariſe independent of any venereal infection, and perhaps may proceed

ceed from a ſcrofulous taint, unleſs they are accompanied, or have been preceded by ſome of the more certain and evident ſymptoms of the lues, we muſt be cautious about pronouncing them venereal. When theſe ſwellings are not owing to the ſyphilitic virus, they are very ſeldom painful, or tend to inflame and ſuppurate; whereas thoſe that are venereal, uſually do, and if they lie upon a bone generally bring on a caries.

Theſe carious ulcers are moſt commonly met with upon the ulna, tibia and bones of the cranium; and when accompanied with nocturnal pains, we can never heſitate about declaring their genuine nature. Frequent abortions, or the excluſion of ſcabby, ulcerated, half-rotten and dead fœtuſes, happening without any manifeſt cauſe to diſturb the fœtus before its time, or to deſtroy it in the womb, may be reckoned as a ſure ſign, that at leaſt one of the parents is infected.

Theſe then are the principal and moſt evident ſigns of the confirmed lues. There are others which are more equivocal, and which, unleſs we can fairly trace them back to ſome that are more certain, cannot be held as ſigns of the venereal diſeaſe; ſuch are, 1. Obſtinate inflammations of the eyes, frequently returning with great heat, itching, and ulceration of the eye-lids. 2. A ſinging and hiſſing noiſe in the ears, with ulcers or caries in the bones of the meatus auditorius. 3. Obſtinate head-achs. 4. Obſtinate cutaneous eruptions, of the itchy or leprous appearance, not yielding to the milder methods of treatment. 5. Swellings of the bones; and, 6. Wandering and obſtinate pains. None

of

of theſe ſymptoms however can be known to be venereal, except they happen to coincide with ſome one or other of the more certain ſigns.

Upon the whole, we are firſt to diſtinguiſh and conſider the ſeveral ſymptoms apart, and then, by comparing them with each other, a clear judgment may be formed upon the general review.

Being thoroughly convinced that the caſe is venereal, we are to conſider, firſt of all, whether it be of a longer or ſhorter date; for the more recent it is, it will, cæteris paribus, be leſs difficult to remove. But there are other circumſtances which will aſſiſt us in forming a prognoſtic as to the event. As,

1. The age of the patient. This diſorder is more dangerous to infants and old people, than to ſuch as are in the flower and vigour of life, in whom ſome part of the virus may be expelled by exerciſe, or may be ſubdued in ſome degree, by the ſtrength of the conſtitution.

2. The ſex. Though women are for the moſt part weaker than men, and therefore ſhould ſeem leſs able to reſiſt the force of any diſeaſe, yet experience ſhews, that this is eaſier borne by them than by men, which ſeems owing to the menſtrual and other uterine diſcharges, by which perhaps a good ſhare of the virus may be carried off immediately from the parts where it was firſt applied; for it is obſervable, that whenever theſe diſcharges are obſtructed, or ceaſe by the ordinary courſe

courſe of Nature, all the ſymptoms of this diſeaſe grow worſe.

3. The habit of body. Perſons who have acrid juices, will be liable to ſuffer more from the venereal poiſon, than ſuch as have their blood in a milder ſtate; hence, when people of a ſcorbutic or ſcrofulous habit contract venereal diſorders, the ſymptoms are always remarkably violent, and difficult to cure. And for the ſame reaſons, the confirmed lues is much more to be dreaded in a perſon already inclined to an aſthma, phthiſis, dropſy, gout, or any other chronic diſtemper, than in one of a ſound and healthy conſtitution. For, as the original diſeaſe is increaſed by the acceſſion of the venereal poiſon, ſo the lues is aggravated by being joined to an old diſorder. The more numerous the ſymptoms, and the more they affect the bones, the more difficult the cure; but if the acrimony ſhould ſeize any of the nobler internal parts, ſuch as the brain, the lungs, or the liver, then the diſeaſe becomes incurable, and the patient will either go off ſuddenly in an apoplectic fit, or ſink under a conſumption.

It is ſufficiently well known, that mercury is the chief, and indeed the only medicine on which we can depend for a cure, whether it be introduced through the pores of the ſkin, in the form of ointments, plaſters, waſhes, or fumigations; or given by the mouth, diſguiſed in the different ſhapes of pills, troches, powders, or ſolutions.

Formerly it was held as a rule, that a ſalivation ought to be raiſed, and a great diſcharge excited,

but this is now found to be unneceſſary; for, as mercury acts by ſome ſpecific power, in ſubduing and correcting the venereal virus, all that is required, is to throw in a ſufficient quantity of the medicine for this purpoſe; and if it can be diverted from the ſalivary glands, ſo much the better, ſince the inconveniencies attending a ſpitting, are ſuch as we ſhould always wiſh to avoid.

Mercury, when combined with any ſaline ſubſtance, has its activity prodigiouſly increaſed; hence the great variety of chemical preparations, which have been contrived to unite it with different acids.

Corroſive ſublimate is one of the moſt active of all the mercurial preparations, inſomuch as to become a poiſon even in very ſmall doſes. It therefore cannot be given in ſubſtance, but muſt be diſſolved, in order to render it capable of a more minute diviſion. We may ſee, by looking into Wiſeman, that this is an old medicine, though ſeldom given by regular practitioners. How it came to be introduced into ſo remote a part of the world as Siberia, is not eaſily found out; but Dr. Clerc, author of the Hiſtoire Naturelle de l'Homme Malade, aſſures us, that the ſublimate ſolution has been in uſe there, time out of mind.

It appears to have been totally forgotten in other places, until of late years, when the Baron Van Swieten brought it into vogue; ſo that now, if we credit Dr. Locker, they uſe no other mercurial preparation at Vienna. The number of patients cured by this remedy alone in the hoſpital

hoſpital of St. Mark, which is under the care of this gentleman, from 1754 to 1761 incluſive, being 4880.

This method has been introduced both in Britain and Ireland, though by no means to the excluſion of others; but it appears, that the ſolution does not turn out ſo infallible a remedy, either in theſe kingdoms, or in France, as they ſay it has done in Germany. The French rather look on it with abhorrence, and talk of its being a certain poiſon; and a late writer of that nation, ſuppoſed to be Dr. Petit, in a ſmall book, intitled, A Parallel of the different Methods of Treating the Venereal Diſeaſe, inſiſts, That there is neither certainty, nor ſafety in any other method, than the repeated frictions with mercurial ointment.

The way to prepare the ſolution is, to diſſolve as much ſublimate in any kind of ardent ſpirit (at Vienna they uſe only corn-brandy) as will give half a grain to an ounce of ſolution. The doſe to a grown perſon is, one ſpoonful mixed with a pint of any light ptiſan, or barley-water, and this to be taken morning and evening: the patients ſhould keep moſtly in a warm chamber, and lie in bed to ſweat after taking the medicine; their diet ſhould be light, and they ought to drink plentifully throughout the day, of whey, ptiſan, or barley-water. If the ſolution does not keep the belly open, a mild purge muſt be given from time to time; for Locker obſerves, that thoſe whom it purges two or three times a-day, get well ſooner than thoſe whom it does not purge; he alſo ſays, that it very ſeldom affects the mouth, but that it promotes the urinary

and cutaneous diſcharges. This courſe is not only to be continued till all the ſymptoms diſappear, but for ſome weeks longer. The ſhorteſt time in which Locker uſed to let the patients out, was ſix weeks; and they were continued on a courſe of decoction of the woods, for ſome weeks after they left off the ſolution.

But mercury may be united with a ſtill larger proportion of marine acid, than it is in the preparation of corroſive ſublimate; as in the following manner. An ounce of pure diſtilled water will diſſolve thirty grains of corroſive ſublimate, and no more; but if ſome crude ſal ammoniac be added to this ſolution, it will then diſſolve a ſmall portion of that ſalt, and afterwards will take up ſome grains more of corroſive ſublimate, and thus produce the ſtrongeſt poſſible ſolution of that preparation.

One or two drops of this ſalino-mercurial ſolution is found to be a doſe ſufficiently ſtrong to begin with, and when mixed with a pint of decoction of the ſudorific woods, generally raiſes a plentiful ſweat, and proves a powerful corrector of the venereal virus. *

But as this medicine requires ſo much nicety in the adminiſtration, it cannot be recommended to ordinary practitioners, who had better content themſelves with the common ſolution of ſublimate, or make trial of the new method which was firſt recommended

* It is this ſtrongly ſaturated ſolution, that was propoſed to be tried in the *Hydrophobia*; and we might alſo have adviſed it in caſes of the *Locked-jaw*.

commended by Dr. Plenck, and ſince improved by Dr. Saunders; namely, that of uniting mercury with mucilage of gum arabic, which is ſaid to render its exhibition perfectly mild and ſafe. For particulars, we refer to Dr. Saunders's treatiſe.

But if neither this, nor the ſolution ſhould be judged expedient, and it is determined to have recourſe to the mercurial frictions, the patient muſt be prepared, by going into the warm bath ſome days ſucceſſively; having been previouſly blooded, if of a plethoric habit, and taking a doſe or two of ſome proper cathartic.

The patient being fitted with the neceſſary apparatus of flannels, is then to enter on the courſe.

If the perſon be of a robuſt habit, and in the prime of life, we may begin with two drachms of the unguentum cæruleum fortius, (Ph. Lond.) which is to be rubbed in about the ankles, by an aſſiſtant whoſe hands are covered with bladders; then having intermitted a day, we may expend two drachms more of the ointment, and reſt for two days, after which, if no ſoreneſs of the mouth comes on, uſe only one drachm, and at every ſubſequent friction aſcend till the ointment ſhall reach the trunk of the body, after which the rubbings are to be begun at the wriſts, and from thence gradually extended to the ſhoulders. In order to prevent the mercury from laying too much hold of the mouth, it muſt be diverted to the ſkin, by keeping the patient in a conſtant perſpiration from the warmth of the room, and by drinking plentifully of barley-water, whey, or ptiſan; but if, nevertheleſs,

vertheleſs, the mercury ſhould tend to raiſe a ſpitting, then, from time to time, we are either to give ſome gentle cathartic, or order the patient into a vapour bath; and thus we are to go on, rubbing in a drachm of the ointment every ſecond, third, or fourth night, according as it may be found to operate; on the intermediate days, either purging or bathing, unleſs we ſhould chuſe to let the ſalivation come on, which, however, it is much better to avoid, as we ſhall thus be able to throw in a larger quantity of mercury.

It is impoſſible to aſcertain the quantity of mercury that is neceſſary to be rubbed in, as this will vary according to circumſtances; but we are always to continue the frictions for a fortnight at leaſt, after all ſymptoms of the diſeaſe ſhall have totally diſappeared; and when we have done with the mercury, warm bathing, and ſudorific decoctions of the ſweetening woods are to be continued for ſome time longer.

This is a general ſketch of the methods of treatment for the confirmed lues; but for a complete hiſtory of the diſeaſe, and for ample directions in every ſituation, we refer to Aſtruc, and his abridger, Dr. Chapman.

Some venereal caſes are ſo very obſtinate as not to yield to mercury; and ſome of the particular ſymptoms will remain even after repeated courſes, particularly the nodes and ſwellings of the periofteum. Theſe are ſometimes cured by a decoction of the roots of meſereon; an ounce being boiled in a gallon of water down to two quarts; a pint of this

this decoction is to be conſumed in the courſe of a day. Such other ſymptoms as are found to reſiſt mercury, may perhaps be conquered by a long continuance of the decoction of ſarſaparilla, aided by the warmth of a ſouthern climate.

CHAP. X.

Of the Frambœſia, or Yaws; and of the Diſeaſe known in Scotland by the name of Sibbens.

THE deſcription which is given of an African diſtemper, vulgarly named the *yaws*, by the anonymous author of a paper in the ſixth volume of the Edinburgh Medical Eſſays, (art. 76) differs, in ſome circumſtances, from one that Sauvages received from M. Virgile, an eminent ſurgeon of Montpelier, who practiſed twelve years in the iſland of St. Domingo; and therefore, he diſtinguiſhes the *Frambœſia* into two ſpecies, *Guineenſis*, and *Americana*.

The *Frambœſia Guineenſis*, is ſaid, by the firſt mentioned writer, to be ſo common on the coaſt of Guinea, and other parts of Africa, that it ſeldom fails to attack each individual, of both ſexes, one time or other, in the courſe of their lives; but moſt commonly during childhood, or youth: "it makes its appearance in little ſpots on the cuticle, level with the ſkin, at firſt no larger than a pin's head, which increaſe daily, and become protuberant, like pimples; ſoon after the cuticle frets off, and

and then, inſtead of finding pus, or ichor, in this ſmall tumor, only white ſloughs or ſordes appear, under which is a ſmall red fungus, growing out of the cutis, increaſing gradually to very different magnitudes, ſome leſs than the ſmalleſt wood ſtrawberry, ſome as big as a raſpberry, and others exceeding in ſize even the largeſt mulberries; which berries they very much reſemble, being knobbed as they are."

Theſe protuberances, which give the name to the diſeaſe, appear on all parts of the body, but the greateſt numbers, and the largeſt ſized, are generally found in the groins, and about the pudenda, or anus; in the arm-pits, and on the face: when the yaws are very large, they are few in number; and when remarkably numerous, they are leſs in ſize. The patients, in all other reſpects, enjoy good health, do not loſe their appetite, and ſeem to have little other uneaſineſs than what the ſores occaſion.

It is believed, that the diſeaſe never appears twice, in the ſame perſon; ſince all the negroes who have had the yaws in Africa, and have been cured there, remain exempt from the diſorder ever after; and the writer of the paper from which the preſent account is tranſcribed, affirms, that, in nine years practice in the Weſt Indies, he never knew any patient to relapſe after having been once thoroughly cured.

M. Virgile deſcribes the ſpecies of yaws that is common among the negroes of St. Domingo, and which Sauvages has termed *Frambœſia Americana*,

as

as beginning from an ulcer, that breaks out indiſcriminately, in different parts of the body, though moſt commonly on the legs; at firſt ſuperficial, and not different from a common ulcer, in any other circumſtance, ſave its not healing by the uſual applications; ſooner, or later, numerous fungous excreſcences break out on the ſurface of the body as before deſcribed, like little berries, moiſt, with a reddiſh mucus. Beſides theſe, the ſoles of the feet, and palms of the hands, become raw, the ſkin fretting off, ſo as to leave the muſcles bare; theſe excoriations are ſometimes moiſt with ichor, and ſometimes dry, but always painful, and conſequently very diſtreſſing: they are alſo mentioned by the author of the article in the Medical Eſſays; and both he, and M. Virgile obſerve, that there is always one excreſcence, or yaw of an uncommon ſize, which is longer in falling off than the others, and which is conſidered as the maſter yaw, and ſo termed. Theſe two, are the only accounts that have hitherto been publiſhed of this diſeaſe; and the reader who wiſhes to be more completely informed, muſt have recourſe to them.

The virus of the *Frambœſia*, like that of the *Lues Venerea*, is capable of being ſubdued by mercury.

The firſt mentioned writer uſed to raiſe a ſlight ſalivation by calomel, and ſays it ſeldom failed him; but previous to this courſe, it was always held neceſſary, that all the virulent matter ſhould be completely thrown out to the ſurface of the body, and for that purpoſe, the patients underwent a certain preparation

preparation by ſudorifics. In St. Domingo, they ſalivated by unction; but it does not appear, that ſucceſs always followed this practice. It is alſo uſual in that iſland to give the ſolution of corroſive ſublimate, along with a decoction of ſarſaparilla.

Twelve ounces of this root, and twelve pounds of the coarſeſt ſugar, macerated for fifteen days, in twelve quarts of water, is mentioned as a ſpecific, and ſaid to be the preſcription of an Engliſh phyſician; the doſe is four ounces every ſixth hour.

It has been already mentioned, that the yaws may be communicated, by any kind of contact; nay, it is even believed that flies often convey the infection; when, after having gorged themſelves with the virulent matter, by ſucking the ulcers of thoſe who are diſeaſed, they make punctures in the ſkin of ſuch as are ſound, and thus inoculate them; in conſequence of which, the diſorder will ſoon appear; provided the *morbific diſpoſition* of body be preſent. (See vol. 1. page 61.)

Sibbens.

A diſeaſe that in ſome of its ſymptoms reſembles the foregoing, and which is equally infectious, if not more ſo, is that known in Scotland, under the name of *Sibbens*. This diſtemper has never yet been ſeen (at leaſt the public is not informed of it) any where, but in Scotland, and eſpecially the Highlands. According to the tradition of the country, it was firſt brought there, in the time of the civil war, by Cromwell's ſoldiers; and did not extend

extend itſelf into the Lowlands, until of late years. However in 1765, the late Dr. Gilchriſt, of Dumfries, finding that it had made its way into that, and the neighbouring counties, thought it neceſſary to draw up a paper, in a plain intelligible ſtyle, and diſperſe it among the country people; containing an account of the various forms that this diſeaſe aſſumes, the progreſs it has made, and the manner in which it is propagated; in order to ſhew by what means it is moſt likely to be ſubdued, and if poſſible exterminated. This paper, was afterwards publiſhed in the third volume of the Edinburgh Phyſical and Literary Eſſays, (page 154) and is the only hiſtory of the *Sibbens* that has yet appeared. It contains an ample deſcription, but rather too vague, and in a manner ſo diffuſe, that it will not admit of an abridgment; we therefore refer to the original, and ſhall only obſerve, that in ſome ſubjects the virulent matter ſettled itſelf in the fauces, and forming ulcers there, deſtroyed the uvula, velum palati, and tonſils; in others, the noſe fell a prey to the acrid humour, and a portion of the alæ naſi was conſumed. In others again, it formed ſuperficial ulcers, like the herpes exedens, and deſtroyed the ſkin in many places, healing in one part, while they broke out in another; ſome patients were ſeen with numerous tubercles on the face, of a reddiſh colour, in figure and ſize, reſembling the ſmall-pox when at their height: but the appearance that has made ſome people conſider this diſeaſe as a ſpecies of framboeſia, is a fungus, which takes its riſe from an itchy tetter, that either ſpontaneouſly, or from ſcratching, becomes raw, and ouzes an ichorous humour: this

ſpungy

ſpungy ſubſtance has the berry-like appearance, and from thence the Highlanders name the diſeaſe *Sibbens*, being their word for a wild raſpberry.

If Dr. Gilchriſt has not been too credulous in reſpect to the variety of ways in which this diſorder may be communicated, it muſt be exceedingly infectious, ſince not only the ſlighteſt contact with a diſeaſed perſon, uſing the ſame ſpoon or knife, drinking out of the ſame cup, wiping with the ſame cloth, or ſmoaking the ſame pipe, are deemed ſufficient for the tranſmiſſion of the virulent matter, but he alſo thinks it not unlikely, that, in certain circumſtances, the breath may become infectious; it is very certain, that want of cleanlineſs, tends, above all other things, to propagate this diſeaſe, which has never been obſerved, among any, but the loweſt and dirtieſt ſort of people.

Formidable as the *Sibbens* may appear, it readily yields to mercury, and in general a ſlight ſalivation is ſufficient; when any of the ſymptoms remain after the mercurial courſe, they are found to give way to the pil. Æthiopic. of the Edinburgh Diſpenſatory, aided by a decoction of the ſweetening woods, or of the rad. bardanæ.

Very ill conſequences were obſerved to enſue, from the repulſion of the acrid humour, by vitriolic lotions, or others of a ſimilar aſtringent and repellent quality.

CHAP.

CHAP. XI.

Of the Morbus Veſicularis.

THE ſhort deſcription which was given of the *Morbus Veſicularis*, in the former volume, page 239, requires ſome amendment; it was there ſaid, that when one crop of veſicles dries off, or heals up, another ſucceeds; from whence it might be inferred, that there are intervals, in the courſe of the diſeaſe, during which, the patient is perfectly free. This however, the author finds, upon further converſation with the gentleman to whom he is obliged for the hiſtory, was not the caſe; for the bliſters or veſicles, were perpetually coming and going, and oftentimes a bliſter has been obſerved to break out, in the very ſame ſpot where there had been one, but a little while before.

It is a very happy circumſtance for mankind that this diſeaſe occurs ſo ſeldom, as it is one of the moſt tedious, and diſtreſſing, in the whole catalogue.

In the only four caſes, that as yet are known, the patients were men, advanced in life, ſixty years of age, and upwards; there was no circumſtance, either in reſpect of conſtitution, or of their previous way of living, that could be conſidered as paving the way for this uncommon diſorder, or which could be held as a pre-diſpoſing cauſe: two of them were perſons of rank, and one of theſe had been

been ſtruck with an hemiplegia, ſome years before the appearance of the *Morbus Veſicularis*; he, and another gentleman, both ſunk under the ſymptomatic fever, that was excited by the painfulneſs of the ſores, into which the bliſters degenerated; the other two patients ſurvived, and recovered perfectly; one of them in ten months, but the other did not entirely get free, until three years were elapſed; during which the veſicles were perpetually coming and going; and they broke out all over the body, from the ſize of a pea to that of a ſixpence; nor did the face eſcape, and in this part they ſuppurated; in other places they either dried off ſlowly, or formed painful ulcers, attended with a ſymptomatic fever.

In the two patients who died, the veſicles were filled with a bloody ichor, and the putrid ulcers that enſued, were intolerably painful, and livid, threatening mortification; but in the two who recovered, the fluid contained in the bliſters did not appear to be of ſo malignant a nature; being either a clear lymph, or yellow ſerum, and the ſores which followed were more tractable.

Various were the means of relief, that were tried; in general they were directed, ſo as to obviate, and correct the ſharpneſs of the juices; the cortex was freely adminiſtered, and ſeemed to be the medicine that did moſt ſervice. A variety of external applications were uſed, but the one that agreed beſt, was a mixture of equal parts ung. alb. camphoratum and ceratum epuloticum, with a little of the flowers of ſulphur; every other liniment, unguent,

unguent, or plaſter that was tried, only fretted the ulcers, and aggravated the patient's diſtreſs.

CHAP. XII.

Of the Leproſy and Itch.

FROM the great number of leper-houſes in ancient times, and the many regulations with reſpect to the ſeparation and management of perſons afflicted with the leproſy; we may conclude that this muſt have been a very frequent diſtemper, in former ages: but whether it be owing to thoſe changes in the general courſe of diet, and that cleanlineſs of perſon, which during the laſt century, and this, have gradually taken place, even among the loweſt ſort of people, (ſince the uſe of ſugar and recent vegetables, and the wearing of linen has become ſo common) or whether the diſeaſe hath altered its form, and blended itſelf with the ſcrofula, and lues venerea, certain it is, that now, in theſe countries, at leaſt, a caſe of the true leproſy is not often ſeen.

This diſeaſe aſſumes a different form, in different places and ſubjects, inſomuch, that we may very well diſtinguiſh five or ſix ſpecies; and accordingly Sauvages has done ſo.

For a general deſcription, we refer to the former volume, page 240; and for the particular ſpecies, the reader muſt conſult the *Noſologia Methodica*, vol. II. page 572.

The

The cure depends on correcting the acrimony by alterative medicines, and a proper courſe of diet. Mercurials and antimonials combined, together with decoctions of the ſweetening woods and roots, are thoſe which are moſt commonly preſcribed, and if aided by a courſe of tepid bathing will ſucceed in moſt caſes. The diet ſhould conſiſt of thoſe nutritious, light, and eaſily digeſtible ſubſtances that are found capable of reſtoring the blood to a ſound ſtate in ſcorbutic habits, and need not be here repeated.

Dr. Mead, in his Medica Sacra, has a chapter on the leproſy; deſcribes it excellently well, and cloſes his enquiry, by ſaying he is convinced from experience, that there is not a better medicine for this filthy diſeaſe, than the tinctura cantharidum. He aſcribes its virtue to the diuretic quality of the flies, diverting the acrid humour from the ſkin, to the kidneys; but he ſays it is neceſſary to interpoſe cathartics, from time to time.

A decoction of the rad. ſeneka, is recommended in leprous caſes, and has been ſometimes known to ſucceed.

Scabies vel Pſora.

The *itch* may ariſe ſpontaneouſly, from conſtantly living on ſalted meats, and the crude farinacea, if at the ſame time, the ſurface of the body is not kept clean, and in a perſpirable way, either by frequent waſhing, or ſhifting of linen; and the ſharp humour, thus generated, may in time come to contaminate

taminate the general mafs of fluids, fo as to render it difficult to eradicate the difeafe.

Thefe cafes will require a fimilar courfe of treatment with that propofed for the leprofy, and the eruption will generally be found of that dry, fcaley nature, which peculiarly marks this diforder.

The *itch* however is moft commonly caught by infection, and, as every body knows, capable of being communicated by the flighteft contact. This adventitious fpecies of the *pfora*, owes its origin to animalcules, or minute infects, fo fmall as not to be feen, without the affiftance of a good microfcope. They depofite their ova in the furrows of the cuticle, where by the warmth of the place they foon are hatched, and then, the little worms, with their fharp heads, penetrating to the cutis, gnaw, and irritate its very fenfible fibres; whence the intolerable itching, which neceffarily obliging the patients to fcratch, and rub off the cuticle, a flight degree of inflammation is raifed, and the fluids from the cutaneous veffels ouzing forth, harden into fcabs.

This being the true caufe of the difeafe, neither cathartics, nor alteratives can be of any fervice, and the whole cure muft here depend on external applications, in order to deftroy thefe very teazing animalcules. And this is eafily effected, either by the means of mercury, or fulphur; two fubftances, that are poifonous, to every fpecies of infect.

The firft ftep however towards the cure, is warm bathing, in order to relax the cuticle, and render its pores more open, for the admiffion of the re-

medy. After being thus ſufficiently prepared, the parts which are overſpread with the eruption, are to be rubbed in ſucceſſion, ſo as not to daub ſuch a large portion of the ſurface of the body at one time, as might occaſion any danger from obſtructed perſpiration; the unguentum è ſulphure of the London Diſpenſatory will anſwer as well as any; or a ſimple mixture of flowers of ſulphur, with as much butter as will give the proper conſiſtence; in caſes where the whole body is ſpread over with the *itch*, the ſulphur ointment muſt be the only remedy; but when the breaking out is not ſo generally extended, and the ſmell of ſulphur is deemed too offenſive, the unguentum è mercurio præcipitato, pharmacop. Londinenſis, will be found equally efficacious, but muſt be uſed with greater caution.

There is ſometimes an eruption met with, which has preciſely the appearance of a common *itch*, but which nevertheleſs, is of a very different nature, as being thrown off by an effort of nature, in the critical way, in order to free the blood from ſome acrid and offenſive humour.

In theſe caſes we muſt carefully abſtain from all external applications, of the ſort that have been juſt now propoſed, eſpecially the mercurial ointment; and rather endeavour to favour the expulſion of the irritating fluid by tepid bathing, drain it off by iſſues, or correct it by a proper courſe of diet and medicine.

In aged ſubjects alſo, we ſhall ſometimes ſee the whole ſurface of the body, ſpread over with an itchy eruption, from the altered condition of the texture

texture of the cuticle and ſkin, not allowing a paſſage, ſufficiently free, for the matter of inſenſible perſpiration. A courſe of vapour-bathing, is the readieſt way to relieve the patients from that diſtreſs, and reſtleſſneſs, which this ſpecies of *itch* muſt neceſſarily occaſion; internals, with reſpect to diet and medicine, being regulated according to the circumſtances of the caſe.

* * * * * * * * * *

We have now gone through all the different genera of diſeaſes that were comprized in the firſt claſs, and have only to ſubjoin an *Index Morborum Univerſalium*, which, by ſhewing the ſeveral ſpecies, and varieties, will compleat our ſcheme of arrangement; and a reference to the page, being placed oppoſite to each, will direct the reader to the ſeveral chapters, and ſections, where they have been reſpectively treated of, and thus, likewiſe ſerve the purpoſe of a common Index.

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